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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

JANUARY 1964 Nav-Pers-O NUMBER 564

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistant Chief for Morale Services

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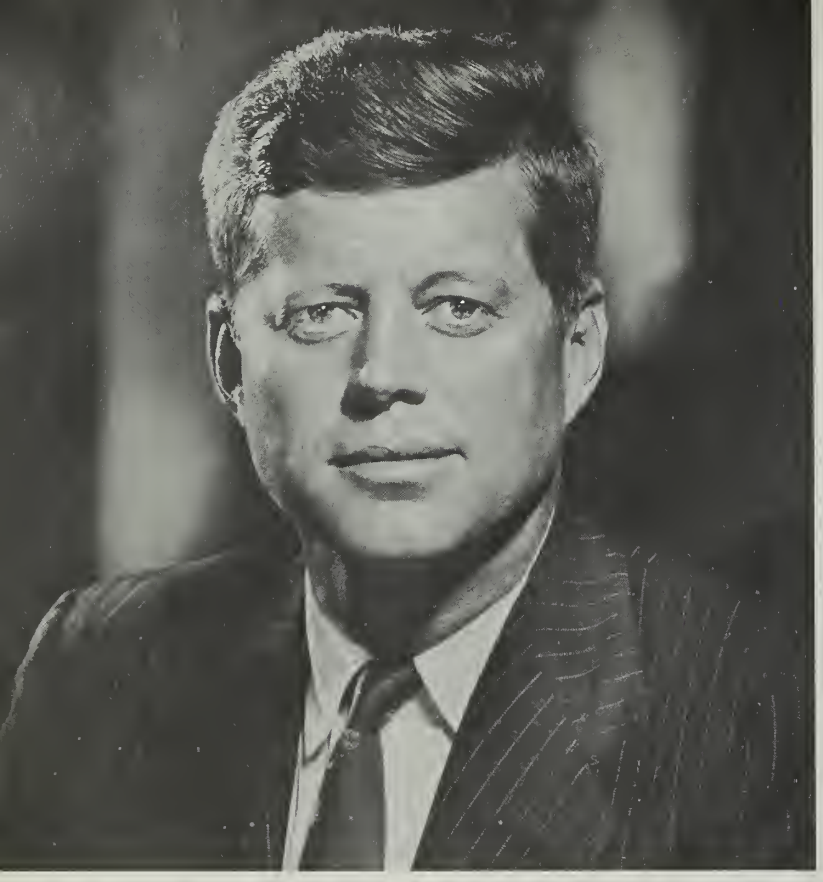
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Jerry Wolff, **Research**
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French Crawford Smith, **Reserve**

• **FRONT COVER: DEDICATION** to nation, flag, and duty, and pride in the opportunity to serve are symbolized by the expression of Navyman Kenneth W. Lerner, YN1, USN. Photo by Walter Seewald, Head of the Photographic Section, Bureau of Naval Personnel.

• **AT LEFT: SOLEMN OCCASION**—Representing the Navy and Nation abroad, crew members stand at stiff attention on board the aircraft carrier USS Saratoga (CVA 60) in the Med.

• **CREDIT:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated. Photo top left page 2 by Fabian Bachrach; Top rt. page 2 UPI Photo; Top left page 4 UPI Photo; Top rt. page 5 UPI Photo; Page 9 Washington Daily News Photo.





John F. Kennedy, LT, USNR (Ret.)

'Strength, Steadfastness

IN THE CHOPPY, churning South Pacific early one dark August morning, a Japanese destroyer rammed an American PT boat, cut it in two, and left its crew for dead.

Thus began a war story of human strength, will and dedication. Its principal role was heroically played by a young Navy lieutenant named John Fitzgerald Kennedy, who personally directed the survival of his crew under seemingly hopeless circumstances.

What appeared to be certain death in a sea covered with flaming fuel became a story of survival for 11 men that has had countless retellings since it first unfolded in August 1943.

But to LT John F. Kennedy, the experience of *PT 109* was but a highlight in a dedicated naval career that neither began, nor ended, in the war-torn Pacific.

In the Spring of 1941, as the possibility of war before Pearl Harbor became more threatening, John Fitzgerald Kennedy, a tall, sandy-haired 24-year-old who the year before had been graduated *cum laude* from Harvard, volunteered his services to the armed forces.

Because of a back sprain suffered while playing college football, he needed five months of remedial exercises to pass the physical requirements.

ON 8 OCT 1941, Kennedy was appointed Ensign, U. S. Naval Reserve.

Ordered to active duty that same month, ENS Kennedy was assigned to intelligence work in Washington, D. C.

On 7 December, when the Japanese struck at Pearl Harbor, he asked for sea duty but, to his disappointment, was transferred to Sixth Naval District headquarters in Charleston, S. C., where he worked on a program for protecting war plants from enemy bombing.

In the summer of 1942, after requesting that he be reassigned as a deck officer, ENS Kennedy was ordered to the Naval Reserve Midshipman's School at Northwestern University, Chicago, Ill., where he was presented with an opportunity to enter the Motor Torpedo Boat service. He sprang at the chance, and, in September 1942, began an eight-week training course in PT boat command at Newport, R. I. Before he had finished the course in December, Kennedy was promoted to LTJG.

Ready for action, Kennedy hoped to be assigned immediately to a PT squadron overseas. However, he was assigned as commanding officer of *PT 101*, a motor torpedo boat then being used for training with the base

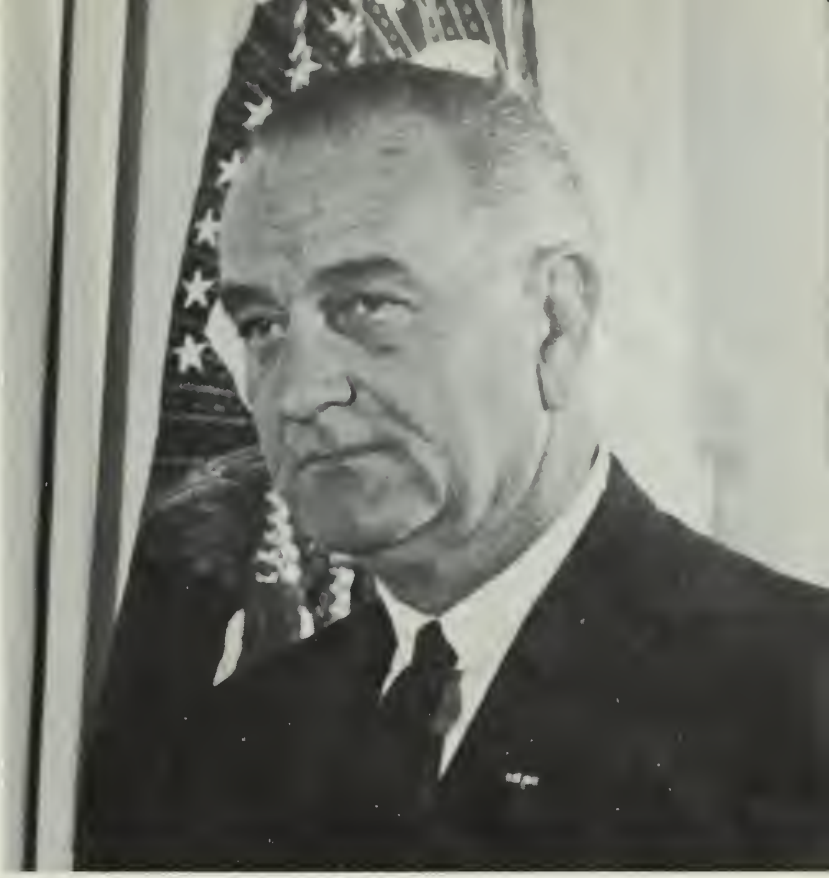
(Continued on page 4)

TASK GROUP 14.7 honors our late Commander-in-Chief.





Lyndon B. Johnson, now CDR, USNR



and Selfless Sacrifice'

AMONG THE THOUSANDS of words that have been written about President Johnson, the fact that he served the nation in World War II, not only as a legislative representative but as an officer in the U. S. Navy, has escaped many people. President Johnson's active duty career was a short one, but Navy readers will be interested to learn that he retains today his commission as an officer in the Naval Reserve.

In 1937, Lyndon Baines Johnson of Texas was beginning what would become a long career in the U. S. Government, leading ultimately to the Presidency.

He had just been elected to the Congress of the United States. From his congressional vantage point, he was able to see the gathering war clouds more clearly than many. On 21 Jan 1940, after completing his Navy physical, he received a commission as a lieutenant commander in the U. S. Naval Reserve.

Three days after the Japanese attacked Pearl Harbor, the man who was to become President of the United States was ordered to the Office of the Chief of Naval Operations for instruction. He then went to Headquarters, Twelfth Naval District at San Francisco and, from there, to New Zealand and Australia, for inspection duty in the Pacific.

FLAGSHIP *USS Bennington* (CVS 20) is flanked by DDs.



WHILE HE WAS stationed on the other side of the world, LCDR Johnson took part as an observer on a number of bomber missions in the South Pacific. On one occasion, when he volunteered for observer duties on an aerial combat mission over hostile positions in New Guinea, the mission nearly ended in disaster for all on board.

The plane developed mechanical trouble while being intercepted by eight enemy fighter aircraft near the target and had to turn back alone, making itself a sitting duck for Japanese attack. Despite these harrowing conditions, LCDR Johnson's coolness enabled him to return with valuable information.

LCDR Johnson's naval career was cut short by a Presidential decision affecting national legislators. President Roosevelt ruled that national legislators might not serve in the armed forces, and on 16 Jul 1942, he was released from active duty.

LCDR Johnson was promoted to the rank of commander, USNR with a date of rank of 1 Jun 1943. He holds the Army Silver Star Medal, awarded by the Commander - in - Chief, Southwest Pacific Area, the Asiatic-Pacific Campaign Medal and the World War II Victory Medal. The Navy is honored to list him today as a member of the U. S. Naval Reserve.



WW II—LCDR Johnson arrives at New Guinea in 1942.

A MESSAGE FROM THE COMMANDER-IN-CHIEF

ALNAV 45
FROM: SECNAV
TO: ALNAV

TO ALL MEMBERS OF THE ARMED FORCES FROM THE SECRETARY OF DEFENSE. I AM PRIVILEGED TO TRANSMIT THIS MESSAGE FROM OUR COMMANDER IN CHIEF TO THE MEMBERS OF THE ARMED FORCES:

"WE HAVE SUFFERED A GREAT NATIONAL LOSS AND SORROW IN THE DEATH OF THE COMMANDER IN CHIEF, PRESIDENT JOHN FITZGERALD KENNEDY. A MAN WHO KNEW WAR AND HATED IT, HE LOVED PEACE ALL THE MORE AND SOUGHT TO MAKE IT SECURE IN THE WORLD FOR YOUR CHILDREN AND HIS. HE WILL BE REMEMBERED AND HONORED FOREVERMORE FOR HIS VALOR AND COURAGE IN SERVING THAT CAUSE OF PEACE WHICH YOU SERVE IN YOUR FAITHFUL VIGIL FOR FREEDOM.

"OUR CONSTITUTION PROVIDES FOR THE ORDERLY CONTINUITY OF THE CIVIL OFFICES OF OUR GOVERNMENT. IN THE TRANSITION BROUGHT UPON US BY TRAGEDY, THERE IS NO INTERRUPTION IN THE CONTINUITY OF THAT COMMITMENT TO *Strength, Steadfastness and Selfless Sacrifice* WHICH HAS KEPT US FREE AND THE WORLD AT PEACE.

"AS YOU STAND YOUR GUARD OF FREEDOM AND PEACE, YOU MAY KNOW THAT THE POLICIES AND PURPOSES OF YOUR COUNTRY ARE UNCHANGED AND UNCHANGEABLE IN SEEKING HONORABLE PEACE, THE FRIENDSHIP AND ALLIANCE OF FREE NATIONS AND THE BUILDING OF A RESPONSIBLE WORLD FREE OF THE CAUSES OF HATRED, DIVISION, OPPRESSION AND HUMAN DESPAIR. PRAYING TO BE WORTHY OF GOD'S GUIDANCE, LET US REDEDICATE OURSELVES TO THE CONTINUING TASKS BEFORE US, REMEMBERING ALWAYS THAT THE PRICE OF OUR LIBERTY IS ETERNAL VIGILANCE."

—LYNDON B. JOHNSON

THE NAVY CAREER OF JOHN F. KENNEDY

(Continued from page 2)

squadron at Newport. (The reason: LTJG Kennedy did so well in the course of his brief training, the school elected to retain him as an instructor.)

Though again disappointed at not being assigned overseas, LTJG Kennedy took his responsibilities seriously and, finally, his request for action was approved.

On 6 Mar 1943, Kennedy departed San Francisco for the South Pacific on board the transport *Rochambeau*. For the most part the three-week voyage was uneventful. (On several occasions unidentified ships caused alarms aboard *Rochambeau*, but all turned out to be friendly.)

On 28 March the transport entered the heavily mined harbor at Espiritu Santo in the New Hebrides. LTJG Kennedy disembarked at Espiritu Santo under orders to proceed to the Solomon Islands for assignment to a PT boat.

IN THE COMPANY of other transient officers at Espiritu Santo, Kennedy boarded *LST 449*, bound first for Guadalcanal, where Army replacements were to be landed, then to Tulagi, destination of the Navymen.

Off Guadalcanal on 7 April, LTJG Kennedy witnessed what had been described as the greatest air attack since Pearl Harbor. Japanese planes swooped down on Guadalcanal and launched a fierce attack. *LST 449*, carrying a cargo of bombs in addition to 170 Army replacements and the transient naval officers, began circling.

About this time a Japanese plane buzzed down and over the LST. Ten feet off the port bow a bomb splashed into the water, and the explosion that followed rocked the ship and lifted her stern out of the water. LTJG Kennedy, who had been below decks, scrambled topside and witnessed what he later described as one of the most spectacular sights he had ever seen.

Of immediate concern were the nine enemy planes directing their attack on *LST 449* and the nearby destroyer USS *Aaron Ward (DD 483)*.

A second bomb hit 50 feet off the LST's port bow, and two others exploded off her starboard bow. A fifth bomb hit off the starboard side abreast of the bridge.

Blasts wrecked landing boats, sprang bulkheads, ruined a pump, and jammed much of the LST's machinery. The landing ship did not receive a direct hit, but *Aaron Ward*, badly torn by a bomb that ripped her engine room apart, sank a few miles off Florida Island after having been taken in tow by a minesweeper.

THE LST FINALLY put into Guadalcanal on 12 April, then moved on to Tulagi where LTJG Kennedy disembarked after more than a month as a passenger at sea.

PT 109, which had already seen plenty of action in the waters north of Guadalcanal, was in the harbor at Tulagi. The motor torpedo boat had been built at Bayonne, N. J., early in the war.

LTJG Kennedy did not have to wait long for assignment to *PT 109*. On 25 Apr 1943, he assumed command.

After selecting a crew, Kennedy's first task was to rehabilitate the boat. It was not in the best of condition. In May the boat went into drydock, and Kennedy and his executive officer, ENS Leonard J. Thom, worked with their enlisted crew members to get *PT 109* ready

tor action. Kennedy and Thom rolled up their sleeves and took a hand in such chores as scraping the boat's bottom, cleaning the bilge, sandpapering and painting.

PT 109 was soon in good enough shape to take turns on night patrols off Tulagi, and by the end of May the boat was in top condition and Kennedy and crew were rapidly becoming acquainted with PT life. The young officer was liked and respected by his crew members.

On 30 May, *PT 109* had a confident young skipper at her wheel and an enthusiastic crew on board when she departed Tulagi for the Russell Islands in preparation for the invasion of New Georgia in the central Solomons.

PATROL DUTIES in the Russells were reportedly as uneventful as those conducted off Tulagi. However, a powerful amphibious invasion armada was forming, and *PT 109* was picked for duty with the Russell Islands Motor Torpedo Boat Squadron, one of many units of Task Force 31.

D-day was 30 June, and *PT 109*, during the hours preceding the landings, patrolled an area between the Russells and New Georgia, torpedoes ready to defend the invasion convoys from attack.

In mid-July, Kennedy received orders to move on to a forward operating base for PT boats at Rendova, one of the larger islands in the Solomons, which was in the midst of the main battles then being fought in the Pacific. (Rendova is approximately five miles from Munda, New Georgia, where U. S. ground troops were fighting to wrest an important airstrip from the Japanese.)

Despite a 10-hour run from the Russells, *PT 109* was ordered out on patrol its very first night at Rendova. Life there was considerably different from the easy-going, if rugged, PT operations at Tulagi and the Russells. The sights and sounds of war were all about. Those on board *PT 109* could watch U. S. planes bombing Munda. Muzzle flashes from the guns of CAPT Arleigh A. Burke's 31-knot destroyers were often visible. The swoosh of shell's could be heard overhead.

NIGHT AFTER NIGHT PT 109 went out to prowl, shield and harass.

On 19 July, two of Kennedy's crewmen suffered shrapnel injuries during an air attack and were hospitalized. Another crewman had been injured and hospitalized some days before when a depth charge on board the boat toppled off its perch.

By 1 Aug 1943, replacements for the injured men had been ordered in, and the *PT 109* crew was in high spirits. The men were to have the night off to spend on the beach at Rendova, having been out on patrol for several nights in succession.

That day, however, the screech of air raid sirens interrupted any such plans. Major action with the enemy was expected to occur that night, and, before the day had passed, Japanese aircraft were indeed swooping down on the PT boats in Rendova harbor, torpedoing, bombing, strafing, and sinking whatever they could hit, while the PTs fired back.

Kennedy ordered his craft to cast off, and steered through a harbor of chaos. Undamaged PT boats were rapidly dispersing. Kennedy zigzagged his PT boat through the harbor and away from the scene until the "all clear" sounded, then returned to his buoy.



FOR HEROISM—LT Kennedy is awarded Navy and Marine Corps Medal by CAPT F. L. Conklin at Chelsea Hospital.

AFTER A CONFERENCE with other commanding officers, and a boat count, 15 PTs were reported in satisfactory condition. Four divisions were formed, each of which was assigned a particular area to cover that night. The idea was this: Disperse the 15 boats adequately to cover every possible approach through Blackett Strait by an expected invasion force. Division "B," to which *PT 109* was assigned, was to be furthest up in Blackett Strait.

At 1830 on 1 Aug 1943, the Rendova harbor sputtered with the sounds of revving PT boat engines, and within three hours all 15 boats were idling or lying to on their assigned stations.

The crew of *109* was tense, but most of the men had little to do except watch and wait. One man on watch noted the passing of midnight and the birth of a new day, Monday, 2 August.

What followed shortly was confusion created by the surprising onrush of four enemy destroyers through the Strait, and the reported inability of the PT divisions to communicate with each other.

Those on board *PT 109*, which was not equipped

PT BOAT speeds forth on special mission during WW II.





'THORN in enemy's side' is description won by PT boats.

with radar, did not even realize that four enemy DDs had slipped by in the darkness. And, of course, there was no way of knowing they would soon be returning.

PT 109 was lying directly in the path of one of the destroyers. Suddenly the DD skipper was presented with the opportunity to crash her iron hull through the plywood ship, which is just what happened.

IT HAPPENED so fast there wasn't a chance to do a thing. "The destroyer hit our starboard forward gun station and sliced right through," LT Kennedy reported later. "I was in the cockpit. I looked up and saw a red glow and streamlined stacks. Our tanks were ripped open and gas was flaming on the water about 20 yards away."

LT Kennedy remembered saying to himself as the DD hit, "This is how it feels to be killed."

Two of the crewmen, MM2 Harold W. Marney, 19, of Springfield, Mass., and TM2 Andrew Jackson Kirksey, 25, of Macon, Ga., were killed, probably immediately, and their bodies never recovered.

The wheel was torn out of Kennedy's grasp, and he was hurled against the rear wall of the cockpit, his once sprained back smashing against a steel brace. Only the angle of collision saved him from being crushed to death.

Watching helplessly, LT Kennedy saw the huge hull sweep past him through his boat, splintering and slicing *PT 109* in two.

Splashed gasoline went up in flames. Most of the crewmen were flung into the water. Some were painfully burned. The stern of the boat disappeared immediately, but the bow remained afloat, and burning.

WHEN THE FIRE died down, six survivors, including Kennedy, returned to the half of the hull still afloat and took a muster. Of 13 men on board, two were missing. Five answered the roll call from the water.

Though his back was badly wrenched, LT Kennedy spent hours in the water locating and rescuing men too injured to swim to the relative safety of the floating hulk. He urged, cajoled, and pushed.

The 10 other survivors later told of his cool courage.

One man, Patrick McMahon, 37, a machinist's mate from Detroit, was so severely burned that he could not use his arms at all, and had given up hope of survival. Kennedy swam out to where McMahon had shouted his position, and for 45 minutes clutched his lifejacket and towed him toward the boat, which by then had drifted a considerable distance from the swimmers. Those on board kept calling their position, and Kennedy followed the sound through the darkness.

Back on board the bow of their ship, the 11 survivors believed that daylight would bring a speedy rescue. By mid-afternoon, with the half hull of *PT 109* sinking and little more than a foot remaining above water, Kennedy decided that the group should attempt to swim for what they hoped would be an unoccupied (by the Japanese) island more than three miles away.

EVERY HOUR in the midst of the larger, Japanese-held islands increased the danger of detection.

Kennedy clenched between his teeth one end of a strap attached to the life jacket of McMahon, who was badly burned and virtually helpless, and towed him on his back. He instructed the others to swim in a group.

Four hours later the exhausted, injured crew reached an uninhabited island known as Plum Pudding, 100 yards long and 70 yards wide. They were still surrounded by larger islands occupied by Japanese forces.

That night Kennedy made his first attempt at being discovered by friendly forces while, at the same time, hiding his presence from the nearby Japanese. He donned a life jacket, grabbed a salvaged battle lantern, and swam for miles with hopes of intercepting an American PT patrol. None came.

The current pulled him out into Blackett Strait, but in the morning returned him to the coral reefs. He was washed ashore exhausted, half conscious, and bore only the news of failure for his men.

After several days Kennedy swam to another island where he found friendly natives. He scratched an appeal for help on a coconut shell, which natives carried through enemy lines to an Australian coastwatcher on Wana Wana, who, in turn, dispatched a war canoe to assist the stranded Navymen, and passed the word along to Rendova.

Memorial services had already been held for the crew of *PT 109*.

A PT boat was dispatched to pick Kennedy and crew up and, on 7 August, with Kennedy hidden under branches laid in the bottom of the canoe, the natives paddled to Wana Wana in full view of the unsuspecting Japanese. That night Kennedy boarded the rescue boat and guided it to his camp to pick up the men. He

LT KENNEDY won NMC Medal for heroism, Purple Heart.



then guided the PT boat back thru the reefs and coral heads, in constant danger of being seen by enemy planes, and on to safety.

AFTER THEIR RESCUE, the officers and men of *PT 109* were taken to sick bay to recuperate. Distressed over the loss of his ship, Kennedy was anxious to get back into action.

Finally Kennedy (by now a lieutenant) was asked if he would be interested in forming a crew and taking over a PT boat that, as an experiment, was about to be converted into a gunboat with weapons more formidable than those normally carried aboard PTs.

Eager for the assignment, Kennedy was made commanding officer of *PT 59*. Of his old crew, five were still available for assignment, and volunteered for further service under JFK.

Kennedy and *PT 59* were assigned to Vella Lavella for patrol duties which included the blocking of western and southern approaches to Choiseul Bay, an important Japanese base. Such patrols continued for two weeks.

On 2 Nov 1943, an urgent message was flashed to Vella Lavella appealing for help for a Marine patrol trapped in a Choiseul swamp. The Marines were surrounded by Japanese troops, rapidly closing in.

LT Kennedy's PT boat was refueling at the time, but he left immediately to attempt the rescue, even though it was understood by all on board that there was probably insufficient fuel to get them back. It was agreed that another PT boat would be dispatched to tow *PT 59* back, if necessary.

By the time *PT 59* reached the site where the Marines were stranded, their situation was near hopeless. Approximately 50 Leathernecks had managed to board a landing craft, which was sinking when Kennedy pulled alongside.

He squeezed them all on board *PT 59* and got them out of there, running beneath enemy guns.

One Marine, who had been wounded, died while lying in Kennedy's bunk.

AFTER A NUMBER of additional patrols, LT Kennedy was sent back to the States, in constant pain with his back and a ruptured disc. He also had malaria.

Back on the East Coast, LT Kennedy served briefly at Newport, R. I., and Miami, Fla., and in May 1944 was transferred to the Naval Hospital at Chelsea, Mass., for treatment.

Because of his injuries he was later released from all active duty. On 1 Mar 1945, he was placed on the retired list of the U. S. Naval Reserve.

In addition to being awarded the Navy and Marine Corps Medal, LT John F. Kennedy earned the Purple Heart Medal for injuries received in action, and was also awarded the American Defense Service Medal, The American Campaign Medal, the Asiatic-Pacific Campaign Medal with three battle stars, and the World War II Victory Medal.

The naval career of John F. Kennedy was relatively brief by career standards. But throughout, it was full of a dedication to duty that will be an inspiration for generations to come.

LT John F. Kennedy, USNR, devoted his entire adult life, and finally gave it, to preserve and advance the life of his country.



IN HONOR—Carriermen form in ranks on the flight deck of *USS Independence* (CVA 62) in Mediterranean.



OVER 20,000 Navymen assemble at NTC, San Diego.



COMFIRSTFLT delivers eulogy on board *USS Saint Paul*.



LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

A Last Tribute to the Commander-in-Chief

Captain, with vigorous hand you have steered a steady course through perilous seas.

Your skill, courage and devotion to duty have never faltered in the face of danger.

You have sailed in uncharted waters, toward still unknown horizons,

Confident in your mission of peace and freedom for all men.

You have been fair to all hands, desiring all to have equal treatment and opportunity.

New England-bred, proud of your Irish forebears, you championed the true cause of free peoples in all ports.

You were a fighting captain in your war against tryanny, poverty and prejudice.

Struck down in the land you loved and fought for, you died in the highest tradition of valiant captains.

Your wonderful spirit and beloved memory will guide us always.

—Douglas P. Sabin, Beverly, Mass.

(This tribute to the late President of the United States was forwarded to ALL HANDS by the writer as an expression of his feelings. It manifests the extent to which this tragic death has touched all citizens of this nation.—ED.

Honor to a Navy Wife

SIR: I have read many letters sent to ALL HANDS and have felt that most of the people who write have an ax to grind. However, I feel that it's time to write about devotion and courage—qualities we all could display more.

I would like to say a few words for the devotion and courage displayed by our Navy wives. I believe that all of us could learn much by taking note of the way the Navy wives have to handle the many problems at home when their husbands are at sea or deployed to some distant shore.

I cannot think of a more harrowing experience than to face a houseful of crying, sometimes ill-tempered youngsters when the father is away, finances are running low, the washing machine breaks down, and the family car just doesn't run right.

There is the constant packing up and moving from duty station to duty station, and having to make new friends. We can well be proud of the courage and devotion of our Navy wives.

Then, too, there may come the time when the Navyman is killed in the line of duty. Here we find the kind of courage and devotion we all should have. This brings me to the real reason for writing this letter—the courage and devotion displayed by the wife of a Navyman who was killed in the line of duty on 22 Nov 1963.

I, as a chief petty officer, feel that I, and every Navyman, can stand a little straighter and hold my head much higher and be very proud of American womanhood because of the courage and devotion shown by Jacqueline Kennedy.

—JOSEPH SEGAR, JR., AOC, USN.

A Credit to the Navy

Since the ceremonies connected with the burial of the late President John F. Kennedy, many letters have been received by ALL HANDS *and other activities praising the behavior of servicemen who participated in these ceremonies. Our Navymen, and particularly the young seaman who carried the Presidential flag directly behind the caisson, have been commended highly. Many of the letters received by other activities have been forwarded to* ALL HANDS *for publication. We are pleased to print the following comments, taken from these letters.*



PRESIDENTIAL flag bearer leaving capitol during funeral procession.

SIR: I know of no other way of informing all the personnel concerned, so I am asking you to do it for me.

The recent ceremonies connected with the burial of our former Commander in Chief filled me with terrific pride in the United States Navy. Every man connected with the many ceremonies conducted himself before millions of the American and foreign public to the everlasting credit of the Navy and themselves.

As a retired Navyman, I naturally watched the Navymen in the ceremonies very closely, and not once did I see a Navyman falter or make a mistake. Of particular pride to sailors the world over should be the bearing and conduct of the pallbearers and the young sailor who carried the Presidential flag behind the caisson bearing the coffin of President Kennedy. They obviously went without food or drink for many hours, and yet not once did they make a misstep or show sings of the exhaustion and discomfort they must have felt.

The Navy has never been famed for its military bearing, but now it must be classified with the best after the terrific display put on by the young men who guarded the coffin, both in the White House and in the Capitol.

I do not doubt that all hands concerned have received letters of commendation from their commands, but I'd like them to know that the "old sailors," the retired Navymen, think they rate a "Very Well Done."—FRED P. KEEGAN, CWO, USN (Ret.), Peekskill, N. Y.

★ ★ ★

AS I WATCHED on television the impressive ceremonies of the past week end, I felt a deep sense of pride in the superb appearance and performance of the young naval and other military personnel who played such a vitally important part in the proceedings. In particular, the young sailor who carried the Presidential flag was magnificent.

Would it be possible to give some public recognition to these officers and men? Perhaps a feature story in ALL HANDS, giving the background of the planning and rehearsal for this event, with mention of the names of the principal figures might be one way to accomplish this.—F. L. PINNEY, JR., RADM, USN, COMCRUDESFLOT 12.

You could do me a great favor if you would give this message to the head of the Navy in regard to the seaman who carried the flag of the late President at his burial.

God bless him. He was a credit to the Navy and the boys of America.—Mrs. James Brown, Yonkers, N. Y.

★ ★ ★

In the funeral procession for our beloved late President, one person in my mind stood out to a remarkable degree. The young sailor who carried the President's flag did an outstanding job. I am sure the honor of bearing the President's flag back of the caisson was something he can always look back to. I have heard numerous people say that his ability to carry the flag such a long distance with never a misstep or change of hands, certainly took much strength, and top physical condition.

I understand he was a seaman without rating. Would it not be possible to see that this young man receives a letter of commendation or other recognition for his remarkable performance?

I should like to know this young man's name and address so I might personally write him and tell him how magnificent he was in the duty assigned to him.—E. John Kerr, St. Petersburg, Fla.

★ ★ ★

All naval personnel connected with the recent sad events did an outstanding job; however, one man seemed to us to stand out above all. He was the young sailor who bore the Presidential flag with such correctness and dignity.

It is hoped that this young American might receive some special commendation for the fine manner in which he fulfilled his duty.—Calvin L. Larsen, Jacksonville, Fla.

★ ★ ★

I wish to request a well deserved commendation for one of the men in the Department of the Navy. This man is totally unknown to me, but he can be easily identified, as he is the sailor who bore the standard immediately following the caisson bearing the remains of President Kennedy to and from the cathedral.

This man's bearing and deportment were above reproach in all respects. Throughout the ceremonies, he never once relaxed his perfect military poise nor let the standard he bore droop in the slightest degree from the prescribed position.

This man is a credit to the service, an example and an inspiration to all who wear the uniform. No finer example of decorum and military bearing has ever been seen. I therefore wish that he should be commended for a very trying job "well done." It is men like this sailor who make us proud of our Navy and, after watching this man for two days, it is my belief that he will acquit himself equally well in every task assigned to him throughout his service with the Navy.—Barney V. Stones, Pine Lawn, Mo.



EDWARD W. Nemeth, SA, USN, drew high praise as a representative of the Navy and bearer of flag in funeral cortege.—Washington Daily News Photo.

★ ★ ★

Before this day becomes a minute older, I want to express my deep appreciation for the part the Department of the Navy played in the services for President Kennedy. While all services performed admirably, our family could not avoid a slight prejudice for the Navy, and we are wholeheartedly happy to commend the Navy for a job well done. We especially commend those responsible for selection of participating personnel, particularly those most in public view.

Our appreciation, also, is boundless for the nameless and unknown (to us) seaman who bore the President's flag with incomparable pride and dignity, errorless precision, unflagging energy and tireless devotion. To us at home, his performance was in the highest tradition of the Navy as we understand it. His demonstration of duty has reaffirmed my faith and made me extremely proud to say: "I too was in the Navy."—James T. Hague, Jefferson City, Mo.

★ ★ ★

I am only 11 years of age, but I think I can write something about what I want to say. I do not know whether this man was from the Coast Guard or the Navy, but he beared the flag of the President, sometimes without the Honor Guard, in the sad procession very well according to what I saw on television.

This man endured the heavy flag and a long walk. I think this man should get some recognition for this.—Jeffrey N. Gregg, Tulsa, Okla.

★ ★ ★

I wish to congratulate the Navy on the selection of the man or men, as I do not know if it was always the same man, who carried the President's flag behind the caisson in the recent sad and impressive ceremonies.

As far as I could tell, he was always in perfect step with the beating of the drums; he was always in the right place at the right time; and he acted as though he might have been the President's son, if he had such a son.

I am a former officer of infantry in World War I and wish to express my feeling of pride in showing what one solitary serviceman could do to add to the dignity of this solemn occasion.—George Melcher, Nashua, N. H.

All of the naval personnel involved in the ceremonies honoring the late President John Fitzgerald Kennedy deserve

recognition for the manner in which they represented the Navy and the Nation. Particular recognition should be given to Edward W. Nemeth, a 19-year-old apprentice seaman from Livingston, N. J., the personal flag bearer following the caisson of the President. Seaman Nemeth enlisted in the Navy barely a year ago, on 4 Dec 1962. He does honor not only to Navymen, but to the youth of the Nation.

The Officer in Charge and Joint Staff Officer for the funeral was LCDR D. J. McNaulty, assisted by the Ceremonial Company Commander and Joint Honor Cordon Commander, LTJG D. A. Simonitis.

The drill master for the honorary platoon, and instructor for the death watch and petty officer in charge of the honor cordon on the steps of the Capitol was R. C. Martin, BM1, USN.

The Navymen who served as body bearers were L. B. Smith, SA, USN, *and H. B. Clark, SA,* USN.

The Navy Ceremonial Guard is composed of approximately 110 non-rated enlisted men fresh out of boot camp. They have already proved themselves to the credit of the naval service.—ED.

Tradition Behind Enlistment Oath

SIR: I'm trying to locate information on "The Enlistment Oath" as part of our division leadership program. After considerable research on the subject, I've come up with virtually nothing in regard to the who, what, when, where, why and how. Certainly the oath has a history. Where do I find it?—C. E. M., TD1, USN.

• *Right here, thanks to the research of the BuPers Legislation Branch.*

The enlistment oath was first prescribed in the old Articles of War for Enlisted Men of the Army. We don't know the date it was first prescribed, except that it was sometime before 1798. (Laws were enacted in 1798 requiring enlisted men of the Marine Corps to take the same oath already prescribed for the Army.)

It wasn't until more than 100 years later that the Navy got the oath—an Act of 3 Mar 1899 provided that Navy enlisted men take the same oath required of the Army and Marine Corps.

The old oath read as follows: "I, ———, do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America, that I will serve them honestly and faithfully against all their enemies whomsoever; and that I will obey the orders of the President of the United States, and the orders of the officers appointed over me, according to the rules and articles of war."

In May 1950, the legislation which enacted the Uniform Code of Military Justice also prescribed an oath for enlisted members of all the armed forces. This oath, later codified in Title 10, U.S. Code, 501, was the same as the oath quoted above, except for substituting "regulations and UCMJ" for "rules and articles of war."

Between 1955 and 1961 a number of bills were introduced to change the oath. The proposed change would require that all persons enlisting in the armed forces "take an oath to support and defend the Constitution." Such a bill, introduced in 1961, was enacted as Public Law 87-751, approved 5 Oct 1962. The law, however, authorized a transitional period of one year before the new oath became mandatory (allowing for time to print new forms).

The new oath reads: "I do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations and the Uniform Code of Military Justice—So help me God."

As indicated in the foregoing, the enlistment oath is prescribed by law. Only Congress can make changes in the oath.

The language of the oath adds to the dignity of an inspiring occasion.—ED.

UNDERPASSING—*USS Midway* is part of inspiring sight as she sails past Golden Gate Bridge into the Pacific.





ADM DEWEY'S squadron is shown in painting of the Battle of Manila Bay.

Dewey's Mementos Go to Navy

THE WAR MEMENTOS of Admiral George Dewey, the only U. S. naval officer to reach "six-star" rank, have been given to the Navy. A medal studded with precious jewels, the admiral's personal journals and 27 medals are in the collection.

The war prizes were willed to the Navy by the admiral's son, who died last year at the age of 90.

Many of the mementos are valuable for other than historical reasons. A medal, covered with diamonds, sapphires and rubies, was given the admiral upon his return to New York in 1899 after the Battle of Manila Bay. A gold cup in the collection is valued at $10,000 and is engraved with the image of Dewey complete with handlebar mustache. A diamond-studded sword, presented to the admiral by President McKinley, as a gift voted by Congress, is also included.

The most unusual object in the collection is a small section from the underwater communications cable which connected Manila and Hong Kong. Orders from Washington came over this cable during the Philippine campaign of the Spanish-American War.

On the night of his victory, Dewey ordered this cable cut when the Spanish refused to permit him to send messages on it. Consequently, Dewey's own account of his victory did not reach Washington until a week after the battle. The message promoting Dewey to flag rank was delayed for a period of 10 days.

The one-star pennant which Dewey flew at Manila Bay was also presented to the Navy. The two-pointed pennant is made of blue denim and looks as though it were cut from a sailor's dungaree trousers.

The four-star flag of Admiral David (Damn the torpedoes, full speed ahead) Farragut is also among the mementos. Farragut, under whom Dewey served during his early career, was Dewey's personal hero.

The collection's historical documents include the admiral's personal letters, three diaries and many of his personal journals and papers. One journal contains the following entry, dated 1 May 1898:

"Reached Manila at daylight and immediately engaged the Spanish ships and batteries at Cavite. Destroyed eight of the forces, including *Reina Christina* and *Castilla*. Anchored at seven off Manila."

The admiral was apparently a man of brevity and strong habit. His most common entry at sea was, "A fine day," or "A good day." Dewey's famous order to Captain Charles V. Gridley, who commanded his flagship, ("You may fire when ready, Gridley") does not appear in his journals.

After the Battle of Manila Bay Admiral Dewey was the hero of a grateful nation. He later became the only Admiral of the Navy—a "six-star" rank—in U. S. history (although he continued to wear the four stars of a full admiral). The admiral died in 1917 at the age of 79.

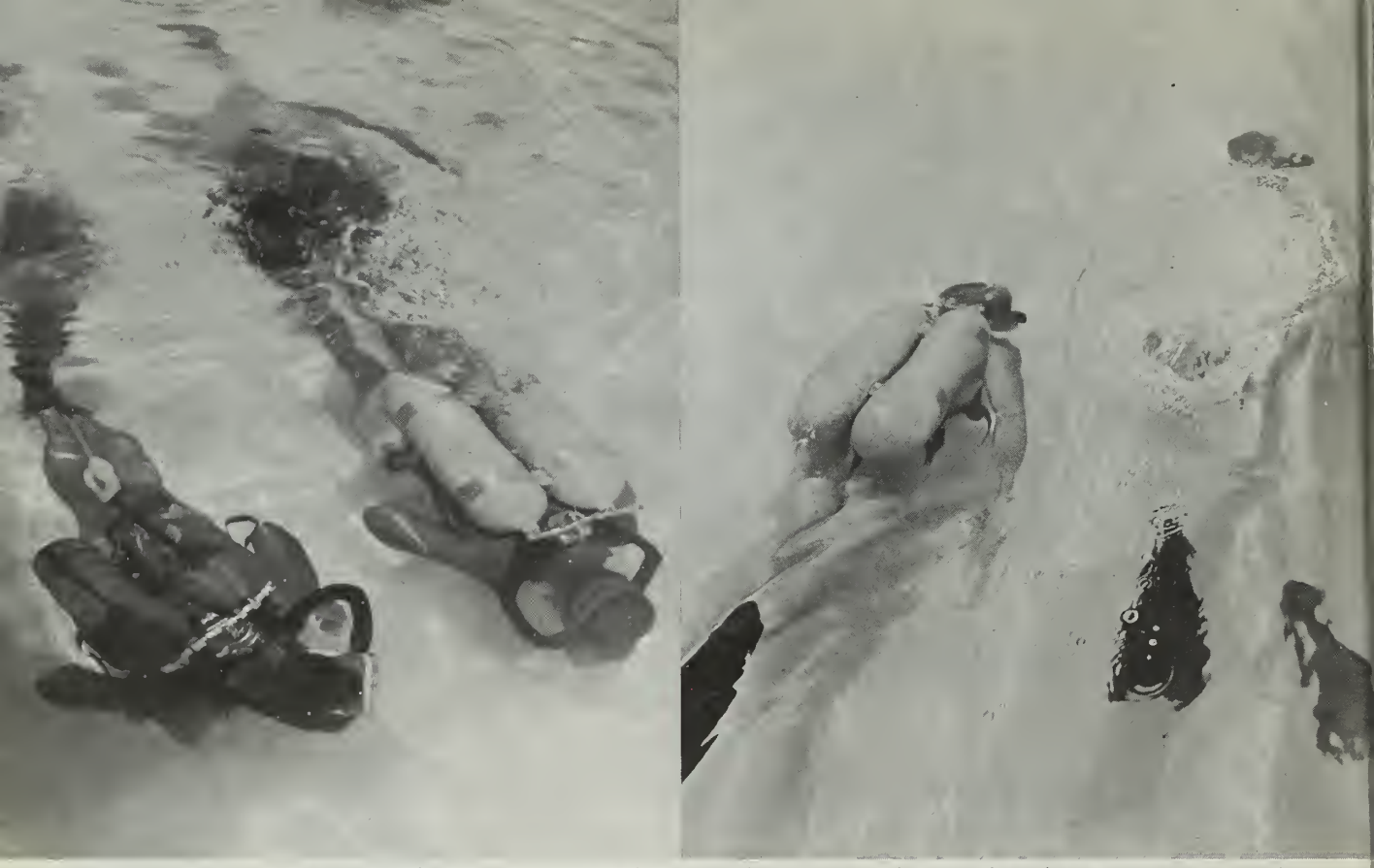


NAVAL HERO—After Battle of Manilo Bay Dewey became a national hero.



MEMENTOS — Jeweled medal was given Dewey on his return to New York. *Below:* Gold cup worth $10,000 is engraved with image of Dewey.





DOWN UNDER — Students of underwater swimming school learn how to use underwater breathing equipment in pool.

Navy's Underwater

This article was written several months ago and scheduled for publication in the January 1964 issue of ALL HANDS. *Although the death of President Kennedy has saddened the nation, the article which begins with a reference to his visit to Key West a year ago, is being published without change because it points up the continuing interest of the late President in Navymen and their varied duties.*

WHEN THE PRESIDENT visited the Key West Naval Base last year, white uniformed sailors lined the streets at stiff attention almost the full length of his inspection route.

Along one block, however, just inside the main gate of the Naval Station, was a strange honor guard of young men—dressed in outfits of sneakers, bathing trunks, fatigue jackets and hats.

At the entrance of the building behind them was a large three-dimensional sign depicting a wooden Scuba diver astride an eight-foot shark. The sign spelled out "U. S. Naval School, Underwater Swimmers."

The Commander-in-Chief, attracted by the unusual sight, halted his motorcade for several minutes to talk with the school's officers. His interest is shared by a large number of people, both inside and outside the Navy.

Mission of the Underwater Swimmers School is to train selected officer and enlisted personnel in all classes of Scuba equipment and underwater electronics locator equipment. The training is for various specialized groups such as Explosive Ordnance Disposal (EOD) technicians and Underwater Demolition Teams (UDT). In addition, personnel from other governmental agencies and representatives of friendly nations occasionally receive indoctrination from the school.



The student divers who greeted President Kennedy were a mixed group containing personnel not only from the Navy, but from the Army, Air Force, and Marine Corps as well. They included classmates from the Coast Guard and the Coast and Geodetic Survey. (Other students have been employees of the Fish and Wildlife Service or the Military Sea Transportation Service, or riggers from naval shipyards.)

SCUBA TRAINING in the Navy is provided at certain other activities. However, only at Key West is Scuba training a primary mission, and the school takes pride in the quality of its training and in the diving competence of its graduates.

Sixteen chief and first class petty officers are assigned as enlisted instructors at the Underwater Swimmers School. They are all themselves qualified divers. They may have been trained with underwater demolition

units or at the school. Some are graduates of the Deep Sea Diving School in Washington. Each has been selected both for his ability as a diver or underwater swimmer and for his leadership capability. All are graduates of instructor school. A measure of the caliber of this outstanding small group is that eight of them have been selected for commissioning in the last five years.

All of the five officers attached to the school are divers. LCDR R. T. Fleming, Jr., the present commanding officer, was trained at the Deep Sea Diving School and was previously executive officer of a submarine rescue vessel. The other officers are trained in UDT, EOD, or in submarine medicine.

The school was founded at Key West in 1954. The warm, clear Florida waters make the location ideal for diving training. The subtropical climate permits training schedules to continue without interruption throughout the year. The school provides training on three different levels, and the curriculum is divided into three sections to give the most efficient, yet flexible, use of instructors and equipment.

College

THE BASIC SCUBA course is four weeks in length. It includes a rigorous physical training program on the athletic field and in the swimming areas, lectures in diving medicine, comprehensive instruction in the mechanics of the diving apparatus, and practice with several types of Scuba in distance swims and in dives up to 130 feet in depth.

Instruction is also given in underwater photography, underwater communication and underwater and ship bottom search methods. Successful completion of this course leads to the designation of a Navy Scuba diver.

The Underwater Swimmers School is known locally in Key West as the Frogman School, and as part of its mission, the school has, since 1962, been giving Scuba indoctrination to trainees of the east coast UDT frogmen. Since these men are already competent long distance swimmers when they come to Key West, they are enrolled in a special course



STEPPING OUT — Students enter water from landing craft for 60-foot dive. *Below:* Students receive final instructions prior to first Scuba dive.





UNDERWATER Swimmers School trains Navymen in all classes of Scuba.

which gives them, in six weeks, basic training in addition to some special UDT exercises.

A prerequisite for the naval course at the U. S. Naval School, Explosive Ordnance Disposal (EOD), at Indianhead, Md., is qualification as a Scuba Diver. Naval personnel designated for this school are sent first to the Swimmers School.

Other students are ordered to the Swimmers School for those phases necessary for qualification to the degree desired by their command or by the Navy. A student could be transferred on TAD for training and then returned to his original command to be utilized as a diver. Or he could be permanently transferred and assigned to a diving activity after qualification as a diver.

Scuba Diver qualification can be earned in four weeks. Quotas for this course can be requested from the Chief of Naval Personnel.

ENLISTED GRADUATES of the Underwater Swimmers School are authorized to wear an embroidered device on the right sleeve of their uniform to denote their diving qualification. The Bureau of Naval Personnel Manual requires the initials "(DV)" shall be placed immediately after the man's rating abbreviation in parentheses and shall appear with his rating abbreviation on all service record pages and on all correspondence pertaining to him thereafter as long as he remains qualified as a Navy diver.

In addition, those enlisted divers who are assigned to a specific diving billet and who keep their diving qualifications up to date are, according to the new diving pay bill, entitled to extra pay each month of $55.

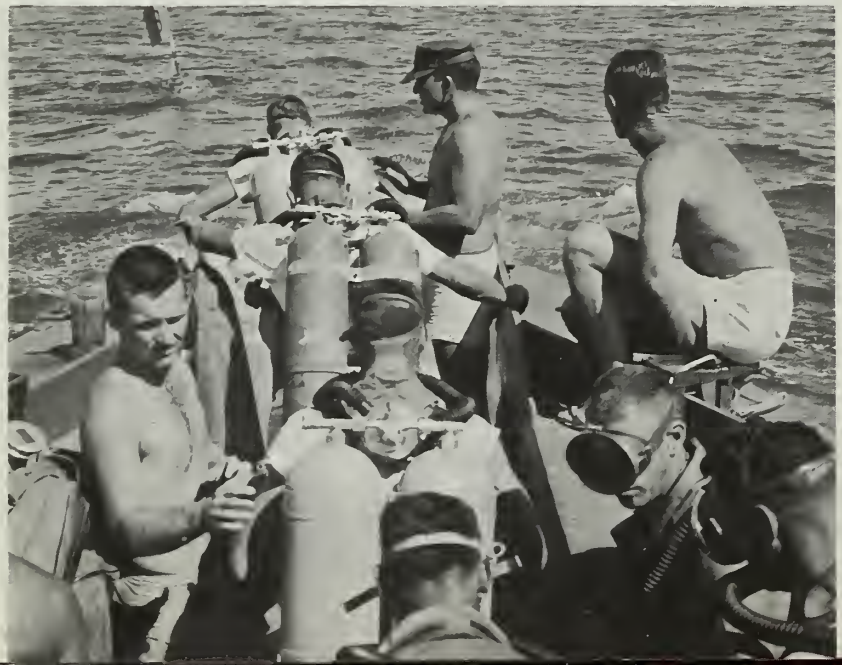
The exact physical requirements for initial diving training are given in the *Manual of the Medical Department* (Article 15-30). Briefly summarized, they require that the applicant should be under 31 years of age. He should be in excellent health and free from any physical defects. He must be a volunteer and have made his decision for good reasons. The limits on over-age, overweight, near-sightedness, and color blindness are the most frequently misunderstood or overlooked in screening.

Any medical officer or medical department representative can advise if a question exists as to the particular application of the physical standards in an individual case.

(Hospital Corpsmen who are physically qualified for diving training and are eligible for independent duty are not sent to the Underwater Swimmers School but to the Deep Sea Divers School. A medical deep sea diving technician is qualified as a Diver 1st Class and is paid an extra $80 a month for diving duty. Corpsmen who think they may be interested in duty of this sort are encouraged to write for further information).

Other administrative requirements are given in BuPers Instruction 1500.15 series, the *Bureau of Naval Personnel Manual* and NavPers 91769. The applicant must be interviewed by a qualified Diving Officer, and pass a test dive in a hard-hat suit, a standard pressure test and a standard oxygen tolerance test given by a diving facility which has the necessary equipment and personnel. Personnel officers should insure that applicants have actually completed the necessary procedural steps and that they are indeed physically qualified for diving before transferring the student to a diving school.

IN THE SWIM — Students dive overboard for 1000-yard practice swim.



COMMONEST CAUSE of failure of those students who otherwise meet all the physical requirements for diving is a "fear of the water." It has been demonstrated time and again that it is useless to try to train persons who believe that they can "beat" this fear. The Diving Officer is on the alert for uneasiness of the applicant during the test dive. The test dive is essential and is superior in this respect to any known physical exam or psychological test.

The student who is getting orders to the school or who wishes to apply should immediately start calisthenics, on his own.

(At the minimum he should be able to do 25 push-ups, 50 sit-ups, and be able to jog for one to two miles at an easy pace.) He should practice to be able to swim 500 to

1000 yards (without touching the side of the pool). The swimming stroke used is an underwater recovery stroke such as the side stroke or the simple breast stroke.

Starting with this minimum the school's calisthenics instructors can easily build the candidate up to the level expected within the allotted four weeks. Physical conditioning and motivation are the two big factors in the success or failure of the student in the first week of the Scuba course.

The school emphasizes safety through physical fitness. Stamina as well as training is the key to safety in and under the water.

THE SO-CALLED "effortlessness" of Scuba diving is actually a misnomer. For example, swimming 1000 yards underwater is the physical equivalent of running the same distance at 10 miles per hour. Swims required at the school are progressively extended as the student increases his stamina and ability.

Self-confidence is built up as the course progresses. However, every student must swim one-half mile with and without swim fins before he is allowed to take his Scuba equipment into the ocean training area. Prior to this he has undergone a thorough indoctrination in the use of the apparatus in the swimming pool under the watchful eyes of the instructors. The student must be able to perform easily with his equipment under normal conditions, and he must react immediately and correctly in the case of mishap or malfunction.

This last capability is tested thoroughly by the instructors during a "harassment period" in the swimming pool.

The 2nd Force Reconnaissance Company, FMFLANT, a volunteer outfit which requires its members to be Scuba divers, has an excellent pre-selection system. Those Marines who apply for the Scuba course, in order to get into the Recon Company, must first pass through a physical conditioning program which fits well into the requirements of the Underwater Swimmers School. With this, plus the excellent Corps motivation, Marines from this outfit have had an outstanding record in every class in which they have participated.



GEARED UP—Wearing mixed gas breathing apparatus, students prepare to go below with hand sonar. *Below:* Scuba students observe demolition blast.

THE IDEAL SCUBA diver is not easy to describe. He can be of almost any size or shape. Mentally, he is intelligent, imaginative, and self-reliant, but also thoughtful, cautious, and conservative where necessary. He must be in excellent physical condition. Coordination is very important. He need not be a professional or skilled athlete, but he should be relaxed and at ease in the water.

Needless to say, he must know how to swim and he must enjoy swimming, but it is not necessary to have been a competitive or racing swimmer. He must have reached his decision to become a diver on the basis of mature, well considered motivations. Incidentally, trained Scuba divers rarely engage in this type of diving as a sport after duty hours because they have a healthy respect of the hazards involved.

The man who is sold on the "adventure and romance" of diving and underwater swimming may end up mistaken and disappointed. Most diving jobs are best described as cramped, cold, uncomfortable, and exhausting.

But if you find satisfaction in physical effort and accomplishment, in completing exacting jobs under difficult conditions, and in being a member of a select group, then you'll enjoy being a diver.

—R. Bornmann, LDCR, (MC), USN







Seal Teams Swim in Sky

WITHIN THE Naval Amphibious Forces there are now two types of Navy frogmen, underwater demolition teams (UDT) and SEAL teams.

Seal teams are Navy units trained to conduct beachhead clearing and clandestine operations. The name SEAL is derived from the words sea, air and land.

Basically Seal training is identical to the UDT training required for preparing beaches for amphibious landings. In addition to working with surface ships, Seals are trained to operate from submarines and can be air-dropped into a coastal area.

However, Seals are expected to be able to operate with little support in restricted waters or on land. Because of this, they are taught methods by which they can operate in shallow waters or ashore, where they may encounter enemy forces Such training consists of hand-to-hand combat, use of personal weapons, survival techniques, and language training.

These techniques are not normally required of underwater demolition team frogmen.

Two Seal teams have been established as components of the underwater demolition units at Little Creek, Va., and San Diego, Calif. They are under the amphibious force commanders for training and administration, and are deployed to con-







and Sea

duct operations of a naval character.

Clockwise from Upper Left: (1) and (2) Fast flying boats pick up members of SEAL team after mission. (3) SEALs make an approach to enemy beach by way of parachute. (4) SEAL teams blast obstructions on enemy beach to clear the way for amphibious assault. (5) SEAL team returns to USS *Sealion* (SS 315) and enters submerged sub through escape trunk. (6) Navy frogmen leave sub and head for enemy beach.

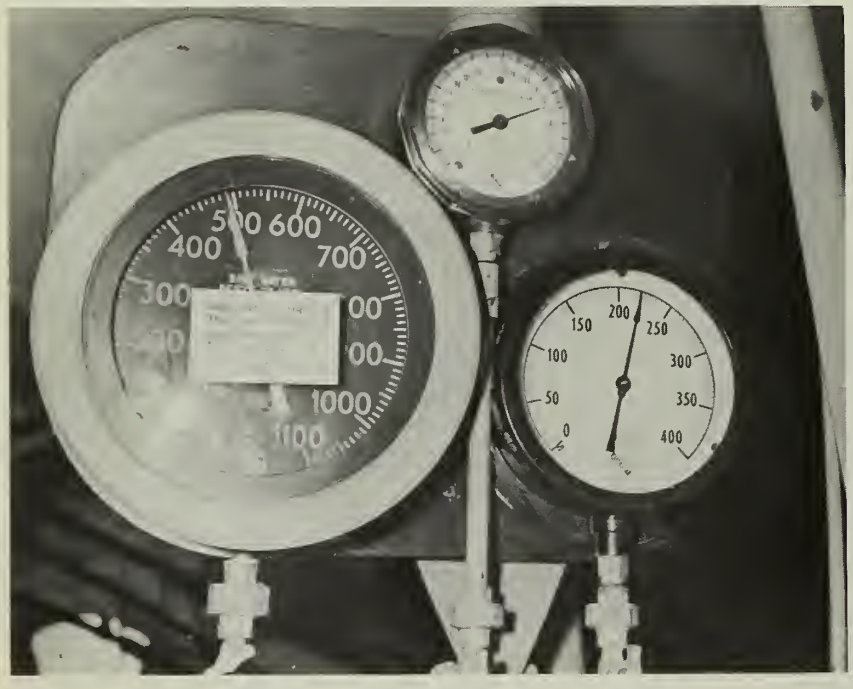




How to



500 BELOW—Navy diver Dick Garrahan, MR1(DV), is lowered into diving tank. *Below:* Tank's gages record depth reached during the diving experiment.



DICK GARRAHAN, like all other Navymen, has abbreviations which follow his name to identify and distinguish him from other white hats. Dick's happen to be MR1(DV), USN (the DV stands for Diver), indicating that he is a qualified Navy deep sea diver.

Likewise, Ernie Harmon, SF1 (DV), and Purdy Laferriere, HM1 (DV), are entitled to this distinction.

We mention these three because they are a little special—because they are divers attached to the Navy's Experimental Diving Unit in Washington, D. C., and because they did something no other Navy divers have done in over 10 years. They did the "500."

By making separate simulated dives in a pressure tank at EDU, the three have experienced the effects of diving to 500 feet. Except for not being made in the open sea, the dives were authentic—that is, they were done in water, using standard deep sea diving equipment. Air pressure in the tank was used to simulate the tons of water pressure present at such a depth.

This does not establish any record and is not, by a long stretch, a "first." (In 1949, 11 Navy divers made simulated dives to 561 feet at EDU.) But the event *is* notable, because it shows that the Navy is continuing its efforts to establish a deeper diving capability, and because the procedures these men and others like them are experimenting with—at certain risk to themselves—may someday be responsible for saving men's lives.

Divers are concerned with repair and salvage work, investigation of disasters, submarine rescue work and a variety of other underwater tasks. Many of the assignments they now fulfill could be accomplished quicker, more easily, and sometimes more effectively if divers were able to go deeper and remain on the job longer. Also, many jobs they cannot tackle (including submarine rescue work below certain depths) would be possible if the Navy's diving capability were expanded.

THE PRESENT Fleet capability for a working dive is 385 feet. Using conventional apparatus and methods, it takes four hours to complete this

Make a 500-Foot Dive

dive, yet the diver has a scant 20 minutes bottom time (which includes the five minutes or so required for his descent). He must spend over three and a half hours in the slow process of "decompressing" on the way up, stopping for specified times at various depths according to a table.

There is a very logical and widely understood reason for this decompression process. Decompression must be rigidly controlled in order to avert the bends, caused by too sudden a change from high pressure to ordinary air pressure.

When Garrahan, Harmon and Laferriere were at 500 feet, their bodies were subjected to air pressure of about 200 pounds per square inch. Under such pressure, the blood absorbs gas at a very high rate from the air a diver breathes. A man's body at the time might be compared to a bottle of soda water.

When you place your thumb over the opening, then shake up the bottle the water appears to be unchanged so long as the pressure is maintained. But the moment you release the pressure you see the gas come bubbling off the liquid. If you release the pressure all at once the water bubbles out of the bottle, but if you release the gas gradually you can prevent any bubbling from taking place.

As a diver descends, then remains at depth, the gas is forced into his body. As long as he remains under that pressure his blood appears to be unaltered. When he begins to ascend, the excess gas in his blood must be released slowly to avoid the formation of bubbles.

ONE INNOVATION that helped reduce the gas-in-the-blood problem came into use some years ago, when helium was substituted for nitrogen in the diver's air supply. Helium is not absorbed by the body in such great quantities as nitrogen, and it escapes from the tissues much more quickly, thus cutting the decompression time.

The current experiments at EDU (and at a few other places in the world) are aimed at shortening decompression time further by:



- Testing special formulae for mixing quantities of oxygen, nitrogen and helium for the diver's air supply. The idea is to determine the best mixtures for various depths while still meeting the body's requirements for oxygen and gas. Gas must be held to a bare minimum, because the less gas absorbed by the system, the less there will be to dispose of. (An absorbent material mounted inside the diver's helmet soaks up excess carbon dioxide, and the body's tissues burn up the oxygen. This leaves only the nitrogen or helium to be disposed of.)
- Working out the shortest, safe decompression tables; that is, the schedule of how long the diver must remain at various depths on the way up to allow for all the gas to escape from his system.

AS MIGHT BE gathered from what's been said so far, diving to 500 feet is not really the problem—the problem is to get the diver back up safely in a reasonable time.

Using conventional methods, a 500-foot dive, with 20 minutes bottom time, would require five and a half hours. That's a long time for a diver, wearing over 300 pounds of equipment, to remain underwater—especially when you consider that he has worked only 15 minutes.

Garrahan, Harmon and Laferriere, on the other hand, accomplished this feat in slightly over three hours—but not without incident.

The dives were made using special gas mixtures and decompression tables worked out by EDU's senior medical officer, CDR R. D. Workman. Laferriere went first, and everything went well until his ascent reached the 15-foot level. Then he contracted the bends. He was recompressed for a long period.

Then Harmon made the dive, got the bends on surfacing, and had to be recompressed.

A few more minor adjustments by CDR Workman on his tables, then Garrahan was put to the test. When it was all over, an extremely fatigued—but unbent—Garrahan was helped from the tank. And, perhaps, another important step toward a most important goal had been realized.

—Bill Howard, JO1, USN

SUITS HIM—Members of experimental diving unit help Garrahan suit up.







ON THE JOB — *USS Thor* (ARC 4) lays shore end of cable. Floats hold cable in position for sinking.

Underseas Cable Layer

THE PROBLEM of communications has challenged man down through the ages.

From the days of the very first smoke signals, from one bank of a river to another, to the technique of bouncing messages via the moon, from one side of the world to another, men have used all their ingenuity to keep themselves informed.

One technique that dates back to the mid-19th century is the trans-oceanic cable, which has made possible both telegraphic and telephonic communications between continents.

While there are many newer methods of traversing the airways, the trans-oceanic cable plays an increasingly important role. As a result, the job of the Navy's cable laying ships is more vital than ever.

For example, men today are concerned not only with sending messages, but also with gathering data from remote locations where it is impracticable, if not impossible, to station observers.

To connect remote oceanic stations with the observation and analysis centers on the beach, submarine cable, which is virtually unaffected by storms, magnetic disturbances or other adverse atmospheric conditions, is one of the most practicable and effective means. From these stations it is possible to forward information from surface and underwater electronic devices collecting data from the world's oceans to give man increased knowledge of the inner space around him.

TEAM WORK — *USS Opportune* (ARS 41) helps cable layer hold her position.



IN THE PHYSICAL process of installing these oceanic units and laying this cable, three unusual ships of the Service Force, Atlantic Fleet, have come into their own.

These ships, USS *Aeolus* (ARC 3), *Neptune* (ARC 2) and *Thor* (ARC 4) are among four of their type in the Navy and serve the Pacific Fleet as well as the Atlantic. ARC is the abbreviation for "cable laying or repair ship."

Because of the job of the cable

layer, exactness is required in its design. To provide good handling characteristics it needs twin screws, a large rudder, and fine control of engines, for both main propulsion and cable machinery.

On an ARC, cable is fed out over the bow through a system of rollers and chocks from the cable tanks to the protrusion of the bow known as the bow sheaves. (Some ARCs—*Neptune*, for example—have had stern sheaves.)

The ship's three cable tanks, each with a capacity of more than 20 miles of five-inch or 250 miles of coaxial cable, are about 34 feet in diameter.

Another unusual feature of the cable layer is its arrangement of running lights. Since it is sometimes necessary to lay cable by having a tug tow the cable laying ship from astern, the stern of the cable layer becomes, in effect, its bow. Consequently, both red and green lights are positioned to both port and starboard in order to be properly lighted for nighttime operations.

The uninitiated visitor to the cable layer is quite astonished to see on the starboard side a green light facing forward and a red light facing aft, while on the port side the conventional red light faces forward and the green light faces aft.

The cable layer is equipped with extensive equipment which is used to make various types of surveys of underwater areas which necessarily precede all cable laying operations. Since the ocean floor is roughly comparable to the topography of land masses, a survey must be taken to insure that the cable is placed not across mountain peaks but on the smooth ocean floor and valleys.

THE SCIENCE of laying cable is an exact one that leaves little room for error. The conning officer must constantly observe the effects of wind and sea on the slowly moving ship. He must make accurate maneuvers to insure the cable tends properly over the bow and be ready for prompt action should the cable become fouled in machinery or problems develop in the tanks where men are engaged in the hazardous task of "walking out" the cable.

When executing close-in precision work, it is necessary that the conning officer position himself so as to be able to personally observe the cable as it tends over the bow sheaves. For this purpose, a conning station is located forward on the main deck just aft of the bow. This station is completely equipped with sound-powered phones, steering station and engine order telegraph to allow the conning officer the same maneuverability he has on the bridge.



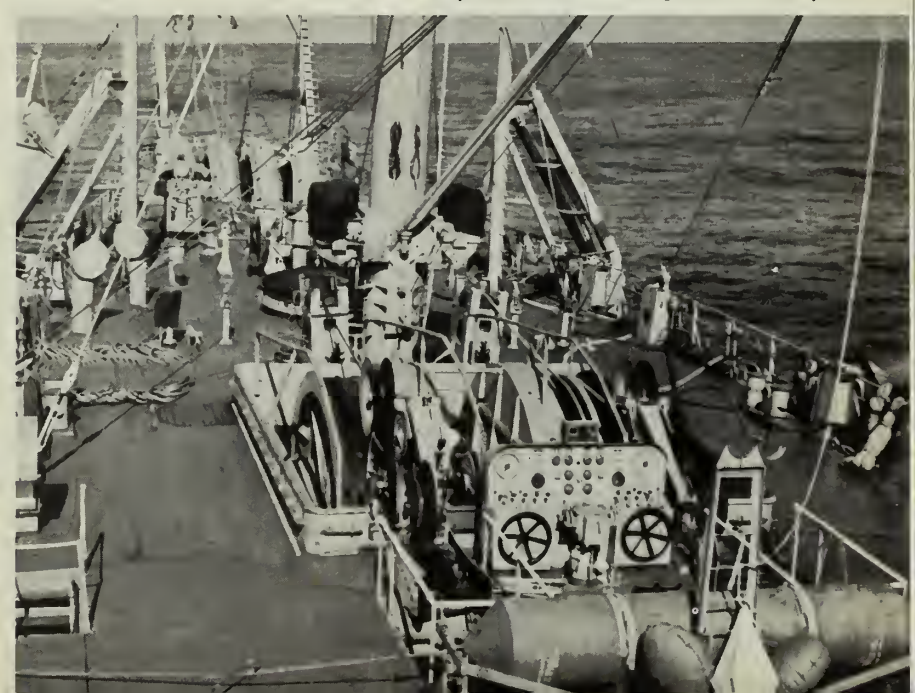
PLOTTING — CO of *Thor* keeps close watch on plot as cable is paid out.

Although the ship may be many miles at sea, the conning officer must know his position, at times, within yards. He must also keep a constant check on the depth of the water in order to determine the effect of cable weight on the tension as measured on deck. The ratio of cable payout to distance traveled and the depth of water is carefully computed to insure that the cable is actually following the contours of the bottom.

Activity is not confined to the bridge alone, however, for cable laying is an all hands operation requiring responsibility and hard work from stem to stern; from bridge to the cable tanks.

WHEN AN OPERATION is begun, the ship's crew is divided into two sections. These sections relieve each other every six hours, working around the clock until the job is completed. This is necessary not only to take advantage of favorable

DECKED OUT — Forecastle of cable ship is studded with gear for her job.







CABLE MEN — Crew member keeps careful track of soundings at depth recorder. *Rt:* Cable is spliced together.

weather conditions but also to avoid complications in the job. Once the operation has started the ship cannot stop because of the grave risk of looping or breaking the cable.

Personnel in the precision navigational aids room gather data from the electronic equipment installed there to help determine the ship's position. The information collected here is passed to the conning officer to aid him in determining maneuvers necessary to keep the ship on its pre-determined cable track.

Many of the cable laying operations are experimental projects which require working closely with civilian representatives of the prime contractor preparing the project.

While the cable is being laid, these technicians man the cable test room. Here are located monitors which indicate constant readings on the conductors in the cable, repeater characteristics, and transmission measurements. Resistance to ground and resistance through loop are also carefully recorded. By using this equipment, the technician can not only locate a flaw in the cable but can also determine its location.

Down in the galley, ship's cooks are also working around the clock preparing four full meals a day for the duration of the operation.

WHEN THE END of the lay is finally reached the cable is spliced to the prelaid shore end. This provides an especially strenuous workout for the deck force, for the shore end must be recovered and brought aboard with the help of small boats and divers.

Finally, stoppers are passed, buoys are brought aboard and the final splice made. All hands relax, then start cleaning up in preparation for the next operation.

Not all the cable layer's work involves the laying of cable. These ships are designated cable repair ships as well, and it is not unusual for them to be called upon to recover and effect repairs to a faulted cable.

When recovering a cable, a large grapnel line is put out which may contain as many as 15 individual units or hooks. These hooks are of various types, designed for work on the different types of bottoms encountered. The grapnel line is both put out and recovered by the cable machinery, but it is not completely controlled by the cable machinery. It is coiled and/or faked by hand, similar to handling cable.

This gives the deck force a real workout, for the extremely heavy grapnel may run as long as three or four miles.

IN COMPARISON with the magnitude of the jobs they accomplish, the Navy's cable layers are rather small ships. *Neptune*, converted to Navy use from the U. S. Maritime Commission, is 370 feet long, has a beam of 47 feet, and displaces 7387 tons. Her crew is comprised of nine officers and 142 enlisted men.

Aeolus and *Thor*, converted from AKA hulls, are somewhat larger. These ships are 438 feet long, have a beam of 58 feet and displace 7040 tons. Their crews are comprised of nine officers and 196 enlisted men.

The three ships entered service shortly after the Korean War, and duty has taken them to virtually all parts of the world. Although they are considered old, as the age of ships is reckoned, the high state of material readiness and the fine spirit of getting the job done exhibited by their skippers and crews more than compensate for any problem of age.

As expressed by *Neptune's* motto, the Navy cable layers stand ready to, "Find It, Fix It, Hide It," whenever and wherever duty calls.

TWIN SCREWS and large counterbalanced rudder are for slow maneuvering.







Rubber Boat Reconnaissance

A salty veteran of Pacific action in World War II and Korean conflict was once again right in the thick of it.

She is the transport submarine uss *Perch* (APSS 313), home ported in Subic Bay, P. I. Navymen of *Perch* have been furnishing reconnaissance training to U. S. Marines, Special Forces and underwater demolition team personnel, and they also provide training service for allied armed forces.

This time out, *Perch* was loaded with some 60 Vietnamese Marines in full battle dress headed for amphibious training. The submen picked up their rugged passengers at Saigon and transported them down the river about 40 miles where they went overboard in rubber boats for their first lesson in amphibious reconnaissance under the instruction of U. S. military personnel.

The 20-year vet *Perch*, was designated a transport sub in 1948 and in the Korean conflict landed British commandos behind the lines to blow a railroad tunnel.

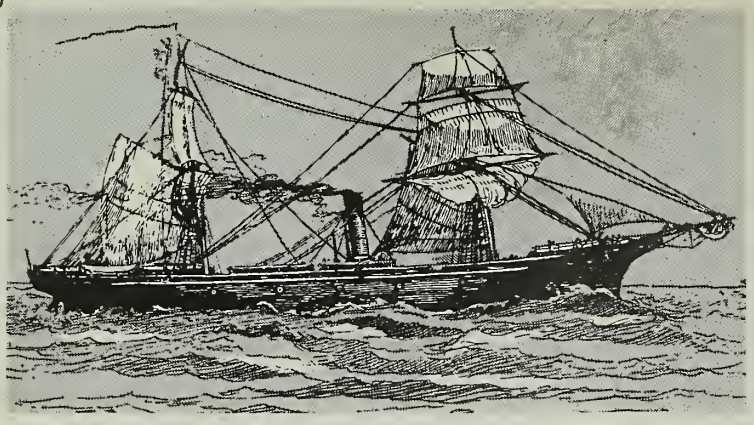
Perch and her crew returned home with the satisfaction of adding another "job well done" to the sub's long list.

Clockwise from top: (1) Deck of uss *Perch* is a busy place as crew inflates rubber boats for amphibious lesson. (2) U. S. Navymen help Vietnamese Marines board boats. (3) *Perch* sailors lower another boat as other marines pull away. (4) Patrol leaves sub behind an they paddle toward beach. (5) Marines storm ashore to establish skirmish line under eyes of U. S. advisors.









Ship's

According to tradition, ships' New Years logs are supposed to be written during the mid-watch on 1 January. In actual practice, we suspect that considerable preliminary work has been done in advance. True, it's normally a quiet watch, with a minimum of distractions for the would-be literati.

You non-mid-watch writers should bear in mind that the log must contain, in addition to any personal feeling or emotion the OOD or his assistants may choose to express, the same essential information to be found in the ship's log at any other time of year.

As defined in *Navy Regs* (Art. 1037), this comprises a formidable list, as appropriate:

Orders under which the ship is operating and the character of duty in which engaged; state of the sea and weather; courses and speeds of the ship; bearings and distances of objects detected; position of the ship; errors of compasses; tactical formation of the ships in company; draft; soundings; zone description; particulars of anchoring and mooring; disposition of the engineering plant and changes thereto; fuel and water; tests and inspections regarding ammunition and other dangerous materials; changes in the status of ship's personnel or passengers except for the recording of receipts and transfers of enlisted

USS Antietam (CVS 36)

Almost nothing could be finer
Than steaming off of Carolina
All alone and out at sea,
Lit with generators one and three—
But at the clubs upon the shore,
The lads are lit with something more.

On this, the Antietam's *final trip,*
We don't have a single VIP.
They're all at home, they'll come no more,
While we steam north on oh-three-four.
Our speed is logged at knots eighteen,
But there's some help from a strong Gulf Stream.

CNABATRA two nine one eight oh four
Ordered us away forever more.
The ship is on course, and Yoke is set,
And our Captain is SOPA, lest we forget,
While one of our Lieutenants Jay-Gee
Conns the ship most skillfully.

From Pensacola, old but frisky,
We sail to Norfolk's anchorage Whiskey,
There to take off our ammunition.
And then to prepare to decommission
Our noble ship, the flying "A".
And that's about all I have to say
Except to wish to all 'round here
A most successful Happy New Year!

One thing more—I'm not a faker.
This log was ghost writ by J. G. Baker.

—Walter E. Berger, III, LTJG, USN.

USS Arneb (AKA 56)

Our ship is tied by its starboard side
To the ice off McMurdo Base.
Six nylon lines should be just fine
To keep it in its place.
The Bravo crew is turning to
By the light of the midnight sun;
Till the snipes are through cleaning Boiler Two,
We're using Number One.

We're drawing juice for the winches' use
From the engine room below;
Generator Two just can't make do,
So Three's lit off also.
For material, we've Yoke, as well
As condition of Readiness Four.
Ships present we see to the number of three,
There's really not room for much more.

The Glacier, Edisto, *and* Merrell, *astern,*
Are trying to moor to the ice.
Until they get tied,
we're alone alongside,
But I think at this point we'll suffice.
In the Glacier, *we know, OTC is below*
Making intricate tactical plans,
But for admin and such (which is really not much),
We're in our captain (SOPA's) own hands.

The Antarctic is nice (if you really like ice),
We can take it or leave it alone.
So you drink your beer, have a happy New Year;
We'll catch up when we get back home.

—J. C. Foster, LTJG, USN.

USS Vogelgesang (DD 862)

Tonight my friends will bid adieu

Log



personnel; damage or accident to the ship, its equipage or cargo; deaths or injury to personnel; meeting and adjourning or recessing of formal boards; and such other matters as may be specified by competent authority.

As we noted above, a formidable list indeed.

The trick is, of course, to enter this somewhat unwieldy material in the ship's log in rhyme combined in some semblance of logical justification. It isn't easy.

However, as our more observant regular readers may have noted, during the relatively few years that ALL HANDS has been publishing these efforts, the quality of those published has shown marked improvement. We like to think.

Since we will have gone to press on the January issue long before New Year 1964 rolls around, we are selecting some choice logs submitted last year.

We'll be looking for your '64 entries any day now.

We most respectfully invite your attention to that submitted by Air Antisubmarine Squadron 26. As far as we are able to determine, air squadrons are not bound by the same rigid requirements as those of ships. This has given LTJG E. C. Heidelbaugh, Jr., USNR, considerably more freedom of expression and as a result, he has launched out into free verse. It's appropriate for this or any year.

To good old 1962,
And lift a drink to
"Auld Lang Syne"
While I just stand here marking time.
I think that I shall shed a tear
Cause they are there
and I am here—
In Boston, Mass., we find our berth
Close to the coldest spot on earth.
Our starboard side is to the dock,
The camels frozen like a rock.
The lines are out, and all
are doubled
In case by higher winds
we're troubled;
And just in case these lines
might tire,
Both fore and aft we've
strung a wire.
Our power, steam, and water clear
Are supposed to come
from the pier,
But when the tide comes in too high
We have to kiss
the steam goodbye.
It seems that if it's underwater
It don't work the way it oughter,
And so a boiler's on the line
To keep us comfy all the time.
The snipes tell me it's Number Two
But I don't really care—do you?
I only know that out on deck
There ain't no heat,
so what the heck!
Around the bay, though still
in motion
Are many ships which ply
the ocean.
To say this really is pedantic,
But they're in the U. S. Fleet,
Atlantic.
My log is done but I'm not through,
I still have several hours to do,
So drink your toast and think of me.
Hello, goodbye—it's '63.

—William S. Hood, Jr., LTJG, USN

USS Kawishiwi (AO 146)

'Til the stroke of 12 of 1963,
All thru the ship—there's little
to see.
Most of the crew's ashore this morn'
Greeting the New Year now
being born.
Anchored at anchorage E-19
this day
In the Philippine Islands,
to be exact, Subic Bay.
In 21 fathoms Kawishiwi *does sit*
Port anchor in mud, with lots
of chain with it.
At 208.1° the northern tower on
Grande Island we sight,
With the tower of Cubi Point
bearing 135.8° . . . we see at
072.2° Kalaklan Point light.
Ships present include various units
of the U. S. Pacific Fleet;
District and yard craft are also here
in this terrible heat.
The commanding officer is aboard—
that we will note,
But COMCARDIV *7 is still senior*
officer present afloat.
He is embarked on USS *Kitty Hawk*
(CVA 63)
Which is at Cubi carrier dock
(or supposed to be)
The engineering department
has orders to be in gear
For departure time at 1600
2 January of this new year.
We know LTJG Knutson
is duty CO,
For all is quiet on the Kawishiwi-oh.
Young Mr. New Year is above
the main deck
Only because condition
Modified Yoke is set.
No. 2 U-Boat and the gig to the
booms are bound,
While en route from fleet landing
to the ship, No. 1 can be found.
So on this midwatch
(from all of us here)
I'll start this log with a
"Happy New Year."

—G. A. Symons, QMSN, USN

USS Balao (AGSS 285)

It's the first of the year
and this is the case
As one observes the Key West
Naval Base.
North of Pier Three, two subs
are tied,
Atule *and* Balao, *side by side.*
Now glancing around is surely a
treat,
These ships of the Atlantic,
pride of the Fleet.
As to the year sixty-three
we open the door,
We notice that SOPA is
COMKWESTFOR.
The crew has been counted,
the absentees: None.
As for the old year, now it is gone.

—Richard R. Oldham, LTJG, USN.

USS Vigil (AGR 12)

We're streaming along
independently,
With Outpost's *CO as the OTC*
He's Commander of Task Unit 2.1
(One five zero the force
designation).

With half of the picket almost gone,
Oh Seven Five is the
course we're on.
Boilers One and Two are on the line,
Our speed's eight knots—
We're doing just fine.

Twelve is the number of our
picket station,
And Modified Yoke is our
material condition.
Our Readiness state is
Number Four,
With power from the
second gen'rator.
At sixteen after the zero hour,
A radar pip has begun to flower.
Its bearing right now is
Zero Nine None,
(A One Seven Four CPA
will be fine).

The distance is twenty miles
(or more),
And he appears (on a course
of Two Eight Four).
Six miles from us is the closest
he'll come,
And the time of that is
Zero One Three One.
Well now 'tis time Zero Two Ten,
And time to turn around again.
Two Five Five will be our
new course,
But the same old Vigil
is still our horse.

—R. D. Philipp, ENS, USNR USN.

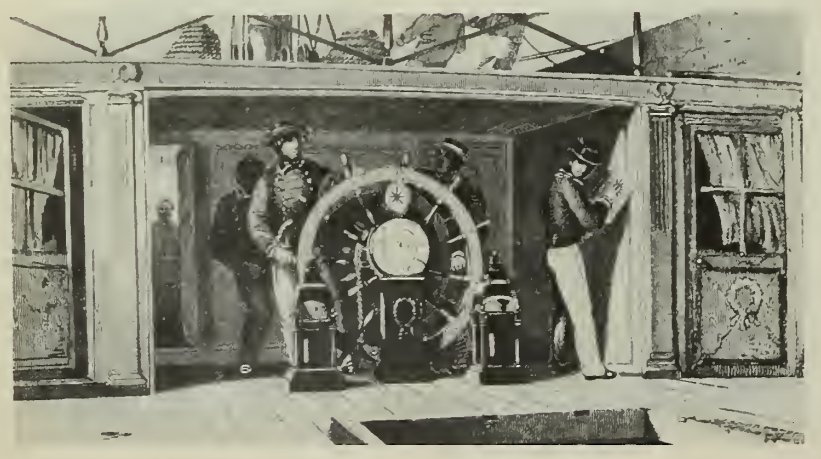
USS Cony (DD 508)

'Tis the first of January, the year '63
We're all nested snugly to Pier 23
With Cecil, *with* Conway,
the Cony, *with* Hank,
And a mighty brisk wind off our
icy port flank.
In Norfolk our home port for
these many years,
We're all side by side at the
D & S Piers.
Starboard side to Conway *is our*
present position,
With six standard lines to
prevent our transition.
Two wires we have, four breast
lines to boot,
So let the seas rise and let
the wind hoot.
The flies are dancing through
old Number Four,
Providing the heat from our skin
to our core.



While Number One whines
throughout the long night,
To show us the way 'til dawn's
early light.
All through the ship,
Yoke has been set,
While the security gang sees all
standards are met.
Various Lant ships abound in
great number,
Allowing our country calm,
silent slumber.
Our SOPA's name is unwieldy
we'll grant,
He goes by the name of
COMASWFORLANT.
The hour has come, the ships'
whistles we hear
Here's wishing you all a
good New Year.

—George Taft, ENS, USN.
and Charles D. Taylor, ENS, USN.



USS AFDB 7

Anchored in Scotland in the
Holy Loch,
Down 15 fathoms are the anchors
of the dock.
On muddy bottom 22 anchors lay,
And 30,000 pounds they each
do weigh.
Three-inch die lock is our type
of chain,
On various scopes and located
the same.



Just a little forward off the bow
of the dock,
Proteus *is moored, and the*
subs of her flock.
Tied along her sides are
Lincoln *and* Lee,
Along with Roosevelt,
home from the sea.
Bravo's generators are running
tonight,
Producing electrons for
power and light.
In Bravo, in Charley, both
night and day,
Boilers fire to keep the chill away,
The fire pump in Bravo is on
the line,
To assure us of pressure
all the time.
Manned and ready by her
faithful crew,
Is our duty boat—LCM Two.
Another small boat ready to run,
And in commission—LCM One.
To save us from flooding below
the decks,
Modified condition "Yoke" is set.
The sounding and security watch
never rests—
All decks echo his endless steps.
In SOPA Bell our confidence rests,
He is COMSUBRON *14 and the*
very best.
The watch is set, the sky filled
with snow,
And one more duty we've yet
to bestow:
To all our shipmates in every way,
"Happy New Year to You,
This New Year's Day."

—Anonymous

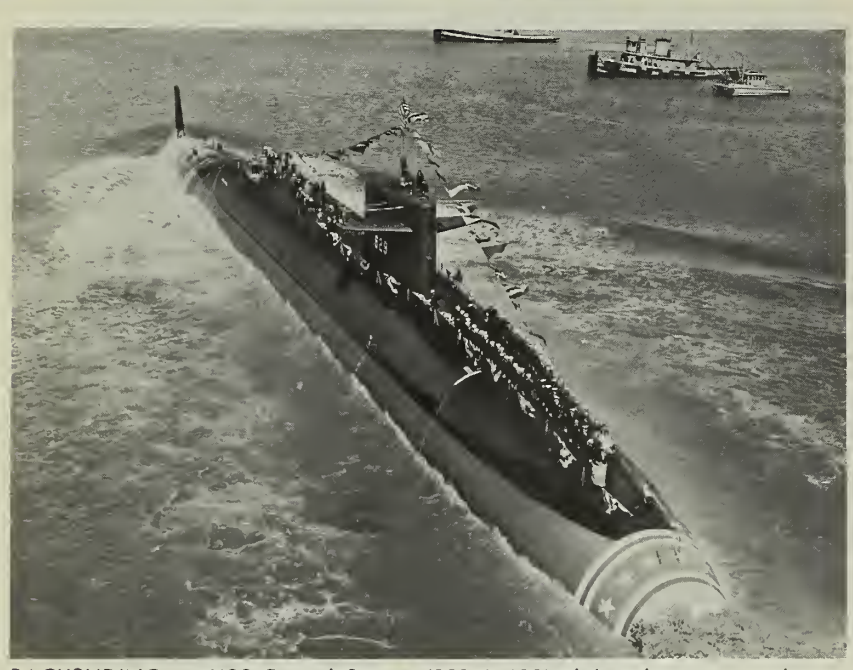
Air Anti-Submarine Squadron
Twenty Six

Another memorable year is over,
departing in such
Insignificant manner that only our
brief celebration this cold night
Reminds us of any transition from
one year to the next.

Actually, this is as it should be, for
the events in all our lives do
Not depend on time but on cir-
cumstances. While we
outwardly celebrate
The coming of the new year, 1963,
let us all inwardly reminisce
In mind and heart the many riches
within our grasp.
Sent to us by God and maintained
by peace-loving people of all
creeds and colors.
Unless we are able to evaluate the
importance of love, peace and
integrity and sincerely
Believe these to far overshadow
worldly possessions, the defense
of our country is without
Meaning. A foreign dignitary once
said that the might of America
stems not from
Armament but from her churches.
Peace cannot be won by
faith alone for no
Religion or way of life can survive
without desire accomplished
by action.
In performing our daily tasks, many
times we underestimate the value
of ourselves and our jobs.
No job, done well and with pur-
pose, is without value.
No mission or
Exercise is completely void of rea-
son. Planes aren't flown and
Ships sailed by captains and pilots
alone. They fly and sail because
Quiet, dedicated men behind the
scenes
Undertake, and carry out, even the
smallest job necessary in
the chain of
Accomplishment which spells suc-
cess and victory. The job is never
Done or peace won by complacency
and bitterness.
Reminding ourselves of those who
have given everything, even
their lives, to preserve
Our heritage, our freedom, our
peace will show how selfish
and dangerous
Negligence toward ourselves and
our jobs can be.
Tonight is not only a reminder of
the past and present;
We must also look to the future. Not
Expecting peace and happiness to
come easily or without effort;
Not relying on someone else to do
our job.
Tonight we see in better perspec-
tive and clearer focus the past
Year—a year of mistakes and sad-
ness, a year of
Sharing and happiness, a year of
experience and learning.
In the coming year, let us all re-
member the past for its value
toward the future and a bet-
ter life in God's care.

X —Emlen C. Heidelbaugh, Jr.,
LTJG, USNR





BACKSLIDING — *USS Daniel Boone* (SSBN 629) slides down ways during launching ceremony at the Mare Island Naval Shipyard, Vallejo, Calif.

Names Chosen for New Subs

The Navy has chosen the names of an early Secretary of the Navy, two early explorers and a former President of the United States to be carried by the last three fleet ballistic missile submarines authorized in the fiscal year 1963 shipbuilding program.

The Secretary of the Navy for whom SSBN 643 will be named was George Bancroft who served as Secretary for 18 months during the administration of James K. Polk. He made his tenure memorable by establishing the Naval Academy at Annapolis and encouraging the growth and importance of the Naval Observatory.

SSBN 644 will carry the names of Lewis and Clark, the two explorers who led the first overland expedition from St. Louis, Mo., to the Columbia River.

The name of James K. Polk will be given to SSBN 645. Polk was the 11th president of the United States.

Lewis and Clark is scheduled for launching in October 1964, *George Bancroft* in November 1964 and *James K. Polk* in January 1965.

BUILDERS OF THE NAVY



John Poul Jones' victory in Bonhomme Richord over the British Seropis encouroged the young Novy's fighters ond estoblished o tradition of perseveronce despite great odds. Bonhomme Richord's heovy guns were out of commission ond her rudder ond rigging were shot owoy. Holf her men were dead or wounded ond fires were opproaching her mogozine but Jones refused to surrender. Britoin's First Sea Lord stoted to one of his commonders: "If you toke Poul Jones you will be os high in the estimotion of the public os if you hod beot the combined fleets." The bottle wos in 1779.

Nuclear Sub Fleet Grows

A dozen new submarines named after fish, statesmen, warriors, frontiersmen, a Hawaiian chief and an Indian chief have joined, or are being readied for, our nuclear underseas Navy.

The submarines are ***USS Lafayette*** (SSBN 616), commissioned at Groton, Conn.; ***Flasher*** (SSN 613); ***Daniel Webster*** (SSBN 626 and ***Tecumseh*** (SSBN 628), launched at Groton; ***Benjamin Franklin*** (SSBN 640) and ***Sturgeon*** (SSN 637) under construction at Groton but not yet launched. Also on the East Coast, ***Jack*** (SSN 605), has been launched and ***Grayling*** (SSN 646) is being built at Portsmouth, N. H. ***John C. Calhoun*** (SSBN 630), slid down the ways at Newport News, Va., while ***Simon Bolivar*** (SSBN 641) is under construction at the same yard but not yet launched. Across the continent, ***Daniel Boone*** (SSBN 629) and ***Kamehameha*** (SSBN 642) are being readied for the Fleet at Vallejo, Calif. *Daniel Boone* has been launched.

Lafayette, the lead ship in a new class of fleet ballistic missile submarines, can fire the 2880-mile *Polaris A-3* missile. She is 425 feet long and displaces about 7000 tons. Longer and heavier than the ten subs of the *George Washington* and *Ethan Allen* class, she has two compartments not built into the earlier models. The added compartments provide a three-man gym and a combination lounge, lecture room, and study hall.

Daniel Webster, John C. Calhoun, Daniel Boone, and *Tecumseh* are *Lafayette* class subs with the same dimensions and capabilities as the parent boat.

Flasher is a high speed attack vessel with antisubmarine capabilities. Her construction was begun in April 1961. Named for a World War II submarine, she is 279 feet long and displaces 3750 tons. The original *Flasher* has been scrapped.

Those submarines building at Groton but not yet launched include *Benjamin Franklin*, named after the early American patriot; *Simon Boli-*

var, the namesake of the liberator from Venezuela who fought to liberate his country and Ecuador, Colombia, Peru, Panama, and the Republic of Gran Colombia from Spanish rule; *Kamehameha,* which is named after the Hawaiian chief who gained control of all the Hawaiian islands in 1795, restoring the agriculture of the islands and opening them to trade with foreigners; *Sturgeon,* which bears the name of the large edible fish found in the north temperate zone; and *Grayling,* named after a fresh water game fish akin to the trout family.

Jack, launched at Portsmouth, is designed to run more quietly than other submarines of her class.

She will carry a powerful sonar system and a precision integrated fire control network for advanced underwater weapons in addition to quiet operational gear.

This sub is 296 feet long, measures 32 feet at the beam, and will displace about 4500 tons when submerged. Her complement will be 10 officers and 85 enlisted men.

She is the second ship of the U. S. Fleet to be called *Jack*; so named in commemoration of the fleet sub *Jack* (SS 259) which was active in the Pacific during World War II.

Champ's Pleasure Is Business

In the Atlantic these days, it seems the crew of USS *Lake Champlain* (CVS 39) is all business.

As members of the Fleet antisubmarine warfare team, *Champ* crew members go about the business of keeping tabs on submarine activity in a methodical, professional manner.

They're also quite businesslike in disbursing their own welfare and recreation funds—much to their own enjoyment.

During the past fiscal year, for example, *Lake Champlain* spent exactly $38,085 on recreational items, using money derived through ship's stores profits. Much of the money went for the usual division parties, sports equipment, reading material, television sets, and other items normally associated with after-hours shipboard activity.

There were, however, some not-so-usual expenditures. For example:

• Purchase of three transport buses. While in the Boston Naval Shipyard for a four-month overhaul last year, the Welfare and Recreation Committee decided that transportation to and from various activities would be no problem for the crew if the ship had its own buses.

• Downtown entertainment. At the same time, half the price of all tickets purchased by crew members for theatrical productions and major league baseball games was paid from W & R funds.

• Weekends home. The fund was also used to help pay for buses chartered each weekend to transport car-less *Champ* crew members from Boston to their home port at Quonset Point, R. I.

Lake Champlain is quick to point out that no "firsts" are claimed in these or other expenditures of her welfare and recreation money. She does, however, believe that the businesslike administration of her crew's fund leaves little to be desired.





THE HONORABLE Paul H. Nitze *(left)* succeeds Fred Korth as SecNav.

Meet Your New SecNav

A career government official who has served under five U. S. Presidents is the new Secretary of the Navy. Paul Henry Nitze, 57, succeeds Fred Korth.

Onetime honor student, and successful business executive, Mr. Nitze has served in a variety of government positions for more than 20 years. He is an author, family man (Mr. Nitze and his wife Phyllis have four children) and dedicated scholar who has helped shape U. S. foreign policy.

Graduated *cum laude* from Harvard University in 1928, Mr. Nitze worked in private industry as an executive until 1942. He entered public service as Financial Director of the Office of the Coordinator of Inter-American Affairs.

In 1943 Mr. Nitze was appointed director of the Procurement and Development Branch of the Foreign Economic Administration, and from 1944 to 1946 he was Vice Chairman of the U. S. Strategic Bombing Survey.

President Truman awarded Mr. Nitze the Medal for Merit for that service.

From 1946 to 1953 Mr. Nitze held a number of positions with the State Department. He served as Deputy Director of the Office of International Trade Policy, Deputy to the Assistant Secretary for Economic Affairs, Deputy Director of the Policy Planning Staff, and, finally, Director of Policy Planning.

In 1953 Mr. Nitze assumed two major foreign affairs positions. He became President of the Foreign Service Educational Foundation, and Associate of the Washington Center of Foreign Policy Research, School of Advanced International Studies.

His experiences prompted him to write a book — *U. S. Foreign Policy, 1945-1955.*

In January 1961 Mr. Nitze was appointed Assistant Secretary of Defense for International Security Affairs.

He was sworn in as Secretary of the Navy on 29 November 1963.

Mr. Korth, who served the President as SecNav for nearly two years has returned to his duties in the field of banking in Forth Worth, Texas. Mr. Korth also served previously as Assistant Secretary of the Army.



MA GOES TO SEA—The newly commissioned *USS Mars* (AFS 1), equipped with computing machines, requires services of 12 Machine Accountants.

Navy Gets New General Store

The first of the new combat store ships (AFS) – which combine the functions of the AF (store ship), AKS (stores issue ship) and AVS (aviation supply ship)—will be commissioned this month. She is *Mars* (AFS 1).

Combat store ships may eventually replace the AF, AK and AVS types in supplying fresh food, aviation supplies and general store items to the Fleet. Much of their cargo will be delivered by two helicopters operating from the ship. This capability of vertical replenishment will augment the latest underway replenishment facilities provided these ships.

Mars will keep abreast of the ship's inventory with a Univac 1004 computer and 12 machine accountants will be on hand to operate the ship's five electronic computing machines.

Mars is 581 feet long and has a 79-foot beam. Only two hatches are necessary to gain access to the ship's supply storerooms, of which there are four for frozen or chilled fresh foods and three for dry provisions.

In the general supplies storerooms, there are more than 47,000 bins and drawers to store supplies.

Supplies will find their way to the deck and helicopter platforms on 11 vertical lift conveyors, the smallest of which is limited to 85 pounds and the largest, 12,000 pounds.

Ships which can't receive their supplies from the cargo helicopters can (if so equipped) employ the new sliding block transfer system. The sliding block system is a Navy development capable of a complete transfer from delivering to receiving ship in only 90 seconds.

Mars is also equipped with conventional rigging and booms for transferring supplies to ships which are not equipped to receive supplies by the vertical or sliding block methods.

Mars will carry a crew of about 430 officers and enlisted men. Thirty one of the crew members will be in the helicopter detachment.

Living conditions in *Mars* are good. Each man's bunk is equipped with an under-mattress-locker and an individual reading lamp. The ship's entertainment system is the latest and, is conducive to a relaxed atmosphere in the ship's lounges. There is also a complete ship's service available, including ship's store; soda fountain; barber, and tailor shops.

Mars is scheduled for deployment in the fall of 1964 in the Pacific. *Sylvania* (AFS 2), a sister ship of *Mars,* is nearing completion. She will be assigned to the Atlantic Fleet under command of COMSERVLANT.

Bomb Spotters of Kume Shima

A carrier-based A4 *Skyhawk* appears on the horizon several miles from a serene coral reef in the South China Sea. As the aircraft approaches the reef a small dot appears behind it; another attack bomber.

The first aircraft holds steady until it approaches the reef. At the proper moment the *Skyhawk* noses up steeply and a small bomb separates from its underside. The A4 speeds away and the bomb falls, sending up a plume of smoke and spray a few yards south of a ten-foot orange metal target.

The second pilot begins his run.

From his perch in a control tower, almost two miles from the point of impact, a chief petty officer sights the plume of smoke and jots down co-ordinates. In another spotting tower a Navyman is taking additional sights. In the control tower the chief plots the bomb's position, which he radios to the aircraft. Then the two men turn to the second aircraft and wait for its bomb to fall.

This reef is the Kume Shima bombing range, the only scoreable range operated by the Navy in the Western Pacific. Here a handful of Navymen maintain the target so that Navy, Marine and Air Force aircraft can practice and perfect their bombing and aerial minelaying techniques.

The men operating the range must spend two hours getting to the site every morning from the Naval Air Facility at Naha, Okinawa. Transportation is via weapons carrier, a small open fishing boat and just plain footwork. This situation is complicated by the necessity for hauling five gallon cans of gasoline for the control tower generator.

Since the Navy considers this reef a pretty important spot, plans are being made for its improvement. One such plan calls for the construction of a building to house the generator and UHF gear and provide the crew with a messing area (sandwiches are at the moment the standard fare).

Ultimately the Navy hopes to replace the towers with the MSQ-44 remote radar spotting device. This apparatus, comparable to doppler radar, will track the aircraft as it makes its bombing run over the target. When in position a button in the plane is depressed, but instead

of dummy bombs or "shapes" being released, an impulse will be relayed to the MSQ-44. Here a computer will tell exactly where the bomb would have hit.

But until then Naha Navymen will man the Kume range towers and will continue to provide U. S. aircraft overseas with facilities for maintaining combat readiness.

Shark Asked to Give Views

A shark's opinion of shark repellents may soon become general knowledge as a result of Navy experiments. Navy scientists in the Bahamas have recorded the heartbeats of sharks to find their reactions to various stimuli.

The electrocardiograms were made while the shark swam freely in a 13-foot pool. Although researchers have previously succeeded in recording a few heartbeats of a beluga whale, this may be the first time anyone has ever obtained an electrocardiogram of a free-swimming marine animal.

The experiments will help the Navy recognize the shark's responses to the sensory stimuli he uses to orient himself in open water. The shark's cardiac reactions to chemical repellents will be important in devising effective shark protection.

The first fish to be tested was a 40-inch lemon shark. An electrode was secured on the shark's underside, near the heart, while the fish was anesthetized. A cable was attached to the electrode and the shark was placed in the pool to recover.

When the shark was fully conscious the cable was attached to a recording device on the edge of the pool and the electrocardiogram was taken.

The shark's cardiac rate ranged between 30 and 65 beats per minute as the temperature of the pool varied, but the heartbeat rate didn't change significantly when researchers tapped on the side of the pool, splashed, or placed dye in the water.

Whether or not the scientists discover a better shark-protection device, the technique used for recording the heartbeats will assist cardiac study of marine vertebrates while closely duplicating the conditions found in nature. This type of test is considered to be more accurate than recordings made while a marine animal is restrained, anesthetized or removed from the water.



SHOW TIME—The Turkish Army Janissary Band performs in hangar bay.

Invaders of Saratoga Given Warm Welcome

When a 14th century Turkish Army unit, equipped with mailed armor, swords and knives, boarded the aircraft carrier USS Saratoga (CVA 60), the crew was ready for them, with a royal welcome.

They were the Turkish Army Janissary Band, which has played for sultans, generals and ambassadors throughout Europe and Asia. Originally organized more than 600 years ago, the band which boarded *Saratoga* was composed of 20 Turkish Armymen and veterans.

The group came aboard to perform for the crew in the carrier's number one hangar bay. While the U. S. airdales watched, the band was lowered from the flight deck on the elevator and marched out with a two-steps-forward, one-to-the-side routine. While marching they played Eastern music on reed instruments, a kuno, trumpets, bugles, cymbals and drums.

After the performance the band members had lunch with the crew on board the heavy attack carrier.



AFTER SNACK—Band members join Monty Leach, MU3, USN, for lunch.

Disaster Hero Honored

A retired Navy lieutenant—central figure in a great rescue on the high seas — recently visited Japan as a guest of people whose lives he saved 18 years ago, and was decorated by the Japanese government.

John L. O. Elliott of San Diego, Calif., during his two weeks' visit, relived the dramatic event with some of the estimated 4254 people he rescued from a sinking Japanese ship, *Enoshima Maru*, nine miles from the mouth of the Yangtze River in January 1946.

Elliott was in command of uss *Brevard* (AK 164) at the time, enroute from Shanghai to the Panama Canal. His ship was gradually overtaking the Japanese transport, which was traveling on a parallel course about 2000 yards off the port bow, when a terrific explosion jarred *Brevard*.

Suspecting that his ship had been damaged, Elliott ordered general quarters sounded. Soon he learned that it was *Enoshima Maru* which had struck a mine, and Elliott promptly altered course to render assistance.

Elliott ordered *Brevard* alongside the Japanese ship, and a spectacular race against time began.

By means of lines, cargo hatch planks and *Brevard's* debarkation ladders, the ship began taking on survivors. There was no panic demonstrated by the Japanese. All persons who could walk quickly scrambled aboard. The injured were given some assistance from *Brevard's* officers and men.

The other ship was sinking rapidly. Fearing she would take *Brevard* with her, or perhaps topple over on *Brevard*, Elliott decided to cast off. He ordered the lines chopped. About 4200 people had been taken aboard in the 30 minutes *Brevard* was alongside.

Brevard then circled to the north of *Enoshima Maru* and anchored 1000 yards from her. The ship's lifeboats and a life raft were lowered and dispatched to rescue the remaining survivors. Among the last to leave the ship was *Enoshima Maru's* captain and some of his officers.

Brevard got underway to return to Shanghai with the survivors. A Navy doctor and pharmacist's mate first class began rendering medical attention to the injured, and even delivered a baby girl. At noon the day after the disaster *Brevard* commenced offloading the survivors. An estimated 25 people were lost as a result of the disaster, which meant that over 99 per cent of *Enoshima Maru's* passengers had been saved. The ship's captain estimated that he could have saved only about 700 without the assistance of *Brevard*.

Elliott's scrapbook on the incident had been opened less and less frequently in recent years, and the rescue that earned him the Navy Commendation Ribbon had faded from many memories. But some grateful people didn't forget.

Earlier this year Elliott received a letter from Yasuhei Umehara, president of the Enoshima Maru Kai, a society formed by the survivors. The letter invited him to visit Japan as a guest of the group.

This society was formed through the efforts of a high school teacher who, as a survivor, felt that something should be done to thank the benefactor of the group.

Through the naval attache in Tokyo, the group was able to locate *Brevard's* former commanding officer.

After arriving in Japan, Elliott was presented with the Third Class Order of the Rising Sun, an award usually bestowed upon men with the equivalent rank of captain or above, on behalf of the Emperor. Later, he and his wife were guests of the Emperor at a palace garden party, and visited with the U. S. Ambassador to Japan.

Elliott appeared on a Japanese television program and the publicity received made him somewhat of a national hero. As he toured the ancient cities of Nara and Kyoto, children by the hundreds asked for his autograph and adults asked him to pose for pictures.

He is a veteran of a 30-year naval career which ended with his retirement in 1947, and which included action during both world wars.



NOW OF AGE—The destroyer *USS Conway* (DD 507), shown firing Weapon *Alfa*, celebrated her 21st birthday while serving with the Sixth Fleet.

ET Chief Uses His Head

Frank Henderson, ETC, USN, had a problem with his classes in electronics at the Fleet Training Center, Newport, R. I. They were overcrowded and there just wasn't enough equipment to instruct his students adequately without keeping them from the Fleet for an unduly long period.

Chief Henderson spent eight months researching, designing, redesigning and building a system of slave devices which would echo his instructions from a master console. Each slave station was operated by two students.

In this way, the chief's students could visualize interrelated circuitry and were better able to solve electronic equipment and maintenance problems in a much shorter time than before. Moreover, they retained more of their theoretical knowledge until they were able to apply it to actual Fleet situations.

Chief Henderson's inventiveness didn't go unrewarded. His commanding officer pinned a ribbon on his chest indicating he had been commended by the Secretary of the Navy for his professional achievement and dedication to the Navy.

Independence Breaks Into Print

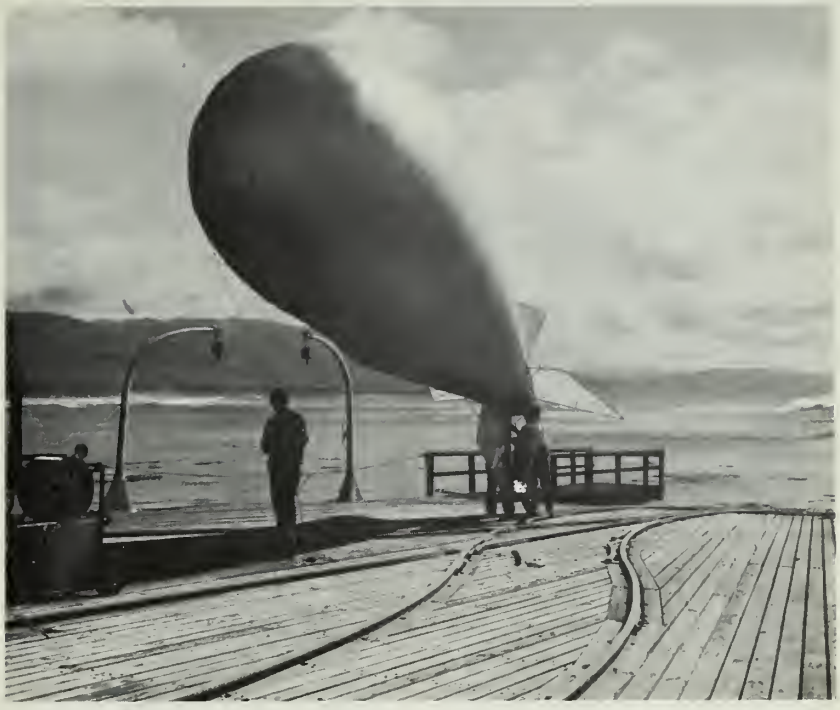
Galley slaves may have gone out of fashion many years ago but, deep in the bowels of USS *Independence* (CVA 62), sailors still man galleys —of type, that is.

Independence has a seagoing print shop which produces, among other items, the ship's newspaper, *The Declaration,* the ship's press kits, graphs and maps. It also does such job printing as cards, tickets and invitations.

Its equipment is impressive. The biggest item is an offset press which turns out the newspaper. There is also a letterpress, known in printing circles as a kicker.

The printer's devil in charge of statistics estimates the print shop has used, since *Independence's* commissioning, enough paper to stretch from New York City to Los Angeles —a distance which, according to the same printer's devil, is 2446 miles

On this paper, the *Independence* printers made a total of 15,327,589 impressions. Most of them, judging from the printers' numerous letters of commendation, were good impressions.



HIGH ANTENNA—A balloon is launched from NAVMISFAC Point Arguello, Calif., to check travel of radio waves from transmitter to receiver.

A Bit of All Right—Eh, Chaps?

Several Patrol Squadron Four aircrews, based at Naha, Okinawa, went out of their way to visit a sister squadron last fall. Over 3200 miles out of their way.

The sister command was Ten Squadron, a unit of the Royal Australian Air Force which flies SP2H antisubmarine aircraft, as does Patron Four. Based in Townsville, Australia, Ten Squadron also went out of their way—to provide a whingding of a visit for the guest aircrews.

The 48 U. S. Navymen toured the Australian underwater national park on the Great Barrier Reef, where they looked through glass-bottomed boats at the brightly colored coral, strange fish and giant clams. Their hosts also escorted them to Sydney on the south-eastern coast and to the aboriginal settlement near Townsville.

When they were not touring Australia the Navymen compared notes with their Australian counterparts and accompanied them on simulated anti-submarine operations.

Ask Yokosuka How to Get There

Ships' captains who want the last word on western Pacific navigation data can't pick a better place to look for it than the U. S. Navy Branch Oceanographic Office at Fleet Activities, Yokosuka, Japan.

The three enlisted men and one officer who staff the branch can almost always supply the necessary information from among their stock of 15,000 charts and information bulletins, which they issue to Seventh Fleet units and the Japan Maritime Self-Defense Force.

Navy ships usually are issued a standard supply of charts from the main distribution office at Clearfield, Utah, before they leave the United States.

The Yokosuka office supplies additional needs and important changes to existing charts.

Information on the western Pacific is kept up to date at Yokosuka with the help of ships at sea which report chart discrepancies and navigational hazards as they are discovered. The branch office also provides charts and publications to merchant vessels when they are otherwise unobtainable.

This information is then forwarded to the U. S. Navy Oceanographic Office in Washington, D. C., and disseminated to all ships and maritime activities in the Far East.

The Yokosuka Branch Oceanographic Office also maintains liaison with the Japan Hydrographic Office in Tokyo through a weekly conference on navigational problems in the western Pacific, at which recently collected information is exchanged.

The Japan Hydrographic Office supplies the U. S. Navy with the latest information concerning Japanese ports. This is in constant demand by Seventh Fleet ships which frequently make goodwill visits to ports not usually visited by American ships.

Last year the Yokosuka office processed nearly 2000 requests for navigational data, involving more than 16,000 separate items. Without the office, ships in the Far East would have to wait for their charts and information to come from Pearl —more than 3000 miles away.

—Norman E. Worra, JO2, USN



'REMINDER' SIGNS are placed alongside roads on Naval Station Roosevelt Roads, Puerto Rico, in attempt to reduce holiday accident toll.

They Went Thataway, *Altair*

An outsider aboard the twin-engined C117D on its flight from Sigonella, Sicily, to Naples might have thought smoke and flame streaming from the starboard engine was routine. The crew's preparations for ditching their aircraft seemed almost nonchalant. In fact, however, none of the six crewmen on board had ever been in such a situation.

The crew weathered the shock of hitting the water and abandoned their plane in favor of life rafts. By this time, search planes had been launched from Naples.

The searchers had their work cut out for them. The sea was rough and rain-swept. Dangerous air currents made it unhealthy for searching copters to hover too near the water.

About an hour after the plane was ditched, a Naples-based chopper sighted flares near the rafts and attempted a rescue but the weather made it impossible.

The Search and Rescue Center at NAF Naples dispatched a message to all ships in the area giving the location of the bobbing life rafts. The message was intercepted by uss *Altair* (AKS 32) which was preparing to enter the harbor at Naples.

Altair's captain ordered the course reversed and set out on a search for the downed crewmen.

At 0100 the next morning, after following flares dropped from an aircraft, *Altair's* searchlight spotted the drenched Navymen on their rafts. A whaleboat was launched in the rough sea and a few minutes later the six relieved Navy airmen were safe on board.

Altair resumed her course toward Naples where her refugees were taken to the Naval Air Facility in the ship's helicopter.

From Naples, they were flown, in borrowed uniforms, back to Sigonella where they were met by some very, very happy families.

Big Benn Breaks Ice in Alaska

Juneau and Kodiak, Alaska, may be located in cold country, but the welcome they gave uss *Bennington* (CVS 20) was decidedly warm-hearted.

Juneau was the first Alaskan port of call for the 40,500-ton carrier, and sailors manned the flight deck to shoot pictures of what most agreed was some of the best scenery they had ever seen.

Bennington dropped anchor almost at the foot of Mendenhall Glacier, and played host to nearly 3000 visitors who were shuttled out to the ship in liberty boats to see what a carrier looked like.

They apparently liked what they saw. When the crew had liberty next day, townspeople drove to the pier to show Navymen the sights, and small boat owners came to the ship to take crew members salmon fishing, then home to dinner later.

"Big Benn" then participated in ASW exercises in the Gulf of Alaska with the destroyers *Benner* (DD 807), *A. A. Cunningham* (DD 752), *Eversole* (DD 789) and *O'Brien* (DD 725), the submarines *Spinax* (SS 489) and *Segundo* (SS 398) and the oiler *Mispillion* (AO 105) before dropping anchor at Kodiak.

Here it was much the same story, with crew members trying their hand at big game hunting and fishing for king crab.

When *Bennington* returned to her home port her crew was convinced Alaska was real man's country.

La Salle Launched

La Salle (LPD 3) was launched recently, making her the third of a series of amphibious transport docks to go down the ways. uss *Raleigh* (LPD 1) and *Vancouver* (LPD 2) are already in commission. Five other LPDs are under construction and two more are authorized.

Amphibious transport dock ships are designed to combine the functions of the attack transport (APA) and the attack cargo ship (AKA). They enable troops to travel to an assault area in the same ship with their heavy equipment.

LPDs are similar to the landing ship dock (LSD), but have a shortened and covered well.

LPDs are designed to land most of their combat-equipped troops in amphibious transport helicopters which can be launched from the helicopter platform built over the well. The platform can hold six CH-37 copters.

Nine landing craft (LCMs), preloaded with troops and equipment too heavy to be carried by helicopter, can be launched from the well deck that opens to the sea at the stern of the ship.

La Salle is 521 feet long and has a standard displacement of 8040 tons. She will be fully manned by a crew of 30 officers and 460 enlisted men and will carry 930 troops and 2000 tons of cargo.

Her armament will consist of four 3-inch/50-caliber twin gun mounts and her speed will exceed 20 knots.

La Salle is due to be commissioned early in 1964.

Gunslinger

A high-performance cannon to be used in aircraft has completed initial tests at the Naval Ordnance Test Station at China Lake, Calif.

The weapon, which is called HIPEG (for High Performance External Gun), consists of three 20mm cannons capable of firing at a com-

bined rate of 210 rounds per second.

Each of HIPEG's guns is a self-powered twin-barrelled weapon mounted in a pod hung from the aircraft much like an external fuel tank or bomb. A cylinder feeds the two barrels which fire simultaneously.

Aside from HIPEG's tremendous firepower (10 times that of World War II aircraft cannons), their pod replacement and reloading can be accomplished speedily. Tests indicate a pod can be attached to an aircraft in about three minutes and removed in one minute. It takes 10 minutes to reload the maximum 750 rounds of ammunition in each pod.

The twin-barrelled gun was invented by an engineer employed by the Bureau of Naval Weapons. A contract has been let for the development of the gun and system.

New Name and Job for Ex-CVE

An escort aircraft carrier which was once stricken from the Navy list joined the active Fleet in December as the Navy's first major communications relay ship. Renamed USS *Annapolis* (AGMR 1), she is the former USS *Gilbert Islands* (CVE 107).

Gilbert Islands was originally commissioned in February 1945, in time to serve seven months before World War II ended. With Marine Air Group Two aboard, the carrier earned three battle stars for combat operations in the Pacific.

After the war she was placed in reserve until September 1951, when she was recommissioned to serve with the Atlantic Fleet. The carrier was put in mothballs for the second time in 1955, reclassified as a cargo ship and aircraft ferry (AKV 39), and in June 1961 was stricken from the Navy list.

But *Gilbert Islands* was not sold for scrap. Six months later she was placed back on the list, and conversion to AGMR was begun in New York.

Cool *Northwind* Off Siberia

An extensive oceanographic survey in the international waters around Siberia is continuing for the second consecutive year. The Coast Guard icebreaker USS *Northwind* (WAGB 282) is conducting the survey, assisted by USS *Staten Island* (AGB 5).

Beginning at Point Barrow, Alaska, the survey will cover areas in the Chukchi, East Siberian and Laptev Seas. At times it will reach within sight of, but outside, the territorial limits of Siberia.

Participating in the survey are scientists from the Naval Oceanographic Office, the Office of Naval Research, the U. S. Weather Bureau and the Universities of Washington and Southern California.

A Few Shrimp for the Lady

The crew of USS *Burton Island* (AGB 1) were in Seattle, Wash., busily preparing for a seven-month deployment to the South Pole. Nearly a month was spent loading stores, then fuel, to outfit the icebreaker for the 32,000-mile voyage.

During this period a beguiling female named Frieda visited the ship. Once, twice, then every day, she came to greet her new friends.

Working overtime to get their job finished on schedule, the crew nevertheless took time out to make Frieda feel welcome. Her charm was overpowering. Everyone came under her spell.

Frieda was impressed both by the crew's hospitality and by its food. Particularly by a delectable dish consisting of raw shrimp.

After all, raw shrimp is a gourmet's delight for a ladylike seagull.



BIRD IN HAND—A frequent visitor on board *USS Burton Island* (AGB 1) at Seattle, Wash., gets acquainted with Leslie F. Hawley, SMSN, USN.

Sabine Comes Home

USS *Sabine* (AO 25) recently returned to her home port at Mayport, Fla. after a five-month deployment with the Sixth Fleet in the Mediterranean.

Sabine refueled Sixth Fleet ships 232 times from one end of the Med to the other, pumping over 15 and a half million gallons of Navy special fuel oil, nearly five million gallons of JP-5 jet fuel and almost 316,500 gallons of aviation gasoline.

She participated in three Fleet training exercises, visited 15 ports and won a commendation from Commander Sixth Fleet before returning.

STATESIDE NOW—Former Sixth Fleet oiler *USS Sabine* (AO 25) is now back at her home port in Mayport, Fla., after five months of fueling ships in Med.







BACK AND FORTH—Navymen on *USS Lowry* (DD 770) enjoy trip through Gaillard Cut and locks of Panama Canal.

Atlantic to Pacific, and Back

How long does it take a ship to go from the Atlantic to the Pacific, and back? Slightly less than 32 hours —at least that's the record achieved by *USS Lowry* (DD 770).

She made the trip via the Panama Canal, and even took time for Pacific coast liberty before returning to the Atlantic.

Lowry had been operating with Task Group *Alfa* on a hunter-killer cruise. She started through the Canal at 0800, and arrived at Rodman Naval Station on the Pacific at 1935 that same day, at which time liberty was granted. The following morning the destroyer left for the 51-mile return trip, and reached Colon on the Atlantic in the early afternoon. All hands were initiated into the "Sacred Order of the Panama Canal."

Orbiting Satellite Stabilized

Another space challenge has been met successfully.

In the past, various attempts have been made to control the attitude of satellites in orbit. If this could be done, a satellite could be kept in a permanent position, with the same side always facing the earth, thus improving the reception of radio signals.

Now the Navy has succeeded in doing this—it has stabilized an orbiting satellite in a permanent position with only one side ever facing the earth. Consequently, the satellite is being governed by the same gravitational energy that causes the moon always to expose the same side to Earth without ever showing its other side.

Here's how it is done. The satellite is shot into space in the normal way. After attaining orbit, a radio signal from the earth releases a 100-foot boom from the satellite. This boom is packed into a canister which is mounted on the the outside of the satellite, and it unfolds like a carpenter's rule.

The copper boom has the effect of an outrigger on a canoe. The gravitational forces acting upon the boom neutralize the gravitational forces acting on the satellite, and the satellite becomes aligned in the predetermined permanent position.

But one problem remained. In space, with no air friction, the boom swung up and down freely, and this swinging motion had to be stopped. This was done through the use of a weight attached to the end of the boom by a very fine hair-like spring. Moving up and down on the spring like a yo-yo, the weight counteracts the swinging of the boom until the satellite/boom unit is practically stable.

The spring itself extends about 40 feet, and is only five times as wide as a human hair. It is so fragile that at sea level it would break from the pull exerted by its own weight. However, in the absence of gravity in outer space, reduced natural strains enable it to carry out its functions.

Previous attempts to stabilize a satellite in orbit employed the use of mechanical equipment, dependent on a supply of fuel or other source of energy, and therefore limited in their period of useful activity. The Navy's new gravitational attitude control system utilizes only passive controls, making it possible for the satellite to remain stabilized throughout its time in orbit.

Pressing Business

Even the crew's dungarees get the starch and press job in USS *Kearsarge's* (CVS 33) ship's laundry. The carrier's laundry is one of the few—if not the only one—among large Navy ships that starches and presses all enlisted Navymen's whites and dungarees.

The antisubmarine carrier's 50 laundrymen work in shifts around the clock to keep *Kearsarge's* 2500 men well supplied with clean, starched clothes.

Like most carriers of her class, *Kearsarge* has two laundries. In the large (or main) laundry washing, starching and pressing are done, while a smaller laundry processes rough-dry items, linens and tablecloths.

While undergoing upkeep in Yokosuka, Japan, the ship's force overhauled most of the laundry's machinery and yard workers installed a new press. During the first three days after leaving Yokosuka, *Kearsarge* laundrymen pressed over 3000 items.

This excellent service is an example of what can be accomplished with adequate shipboard laundry equipment and personnel.





CANAL CRUISE—Men of TG Alfa and USS Lowry crossed through canal from Atlantic for liberty on Pacific coast.

The operating expense of the carrier's laundry is supported by profits from the *Kearsarge* ship's store.

Kearsarge served in the Far East with the Seventh Fleet before her return to her home port of Long Beach, Calif., shortly before Christmas.

Push Button Bakery

Turning out enough pastry to satisfy a ship's crew can be a long, tedious process – usually performed during early morning hours before reveille. Most of the work involves selecting the proper ingredients, putting them together, and mixing them just right.

The commissaryman/baker who prepares bake shop goodies should be pleased to know the Navy is checking out some automatic equipment that takes the mixing out of fixing.

Of interest to the Bureau of Supplies and Accounts is the *Amflow* (as it's called by its designer) push-button bakery, specifically designed for use aboard ship.

Completely automatic from the time baking ingredients are put in until the mixed dough comes out ready for cutting and shaping, *Amflow* can produce in one hour as much as 300 pounds of dough for bread, rolls and pastry. (Roughly, this means 40 sweet rolls per minute.) The equipment insures better control of dough during "proofing" and baking stages, and means uniformity and improved over-all quality. It's much lighter and more compact than the bake shop gear that now takes so much galley space. Best of all, in the view of the ship's baker, *Amflow* means less work.

At last report the machine's manufacturer was trying to extend the automation to include cutting, shaping, and final preparation of dough for the oven.

Though *Amflow* is still under Navy study and consideration it has, indeed, raised plenty of interest.

Airborne Target Tracker

A new laser—part of a family of electronic devices which generate narrow beams of high-energy light—is being developed for a tracking system capable of finding and following airborne targets.

The experimental unit, being developed for Bu Weps, shoots pulses of light to illuminate a target. A high resolution optical receiver (telescopic device) trains on the target, then "sees" it in great detail.

The image received by the telescope can then be used as a visual display for a pilot or can be converted into information for a computer.

The new device has a light pulsating rate believed to be higher than any yet developed in this country. It has been clocked shooting pulses of light at 40 times a second for sustained periods. Lasers to date have been able to reach rates of 10 pulses a second for only short periods.

This is important because lasers with such high pulse rates could eventually augment conventional radar and other sensors in many weapon control systems. Further development could extend the use of the new system to tracking objects in space more accurately, giving more exact readings on speed, direction and location. This ability would also be useful in space rendezvous applications.

Lasers must have high pulse rates in order to supply the system with frequent bits of information on the location and direction of targets with relative speeds of several thousand feet per second.

Laser signals shot out at high pulse rates can plot the position, path and speed of fast-moving objects with greater accuracy than the best radar receiving systems.

Missy Replenishes 600th

USS *Mississinewa* (AO 144) was servicing an attack carrier task force and units of the Royal Hellenic Navy in the Aegean Sea when USS *Mauna Loa* (AE 8) came alongside. The encounter was something of an occasion, for *Mauna Loa* was the six hundredth ship to be replenished by *Mississinewa* in one year of Sixth Fleet deployment.

Since she came to the Mediterranean area, *Mississinewa* has been at sea more than 50 per cent of the time and has steamed some 42,000 miles. During this time, she pumped more than 100 million gallons of black oil, jet fuel and avgas.

THE WORD

Frank, Authentic Advance Information On Policy——Straight from Headquarters

• SHORE TOURS CHANGED—The length of shore duty has been changed for Navymen in some ratings. Most rates affected are modified to provide an average sea tour of 36 months.

The change was based on personnel strength, predicted requirements and other factors bearing on sea/shore rotation.

Further study may result in modifications in the length of shore tours for other rates and for further changes in the length of shore duty for the rates in the current study.

For the time being, however, this is how the picture looks:

Rate	Tour Length Old	Tour Length New
GMCM, GMCS	24	36
GMMC, GMM1	24	36
MTCM, MTCS, MTC, MT1	42	36
MT2	42	24
YNCM, YNCS, YNC, YN1, YN2	48	42
SKCM, SKCS, SKC	30	24

The new shore tour lengths become effective for personnel commencing a shore tour on or after 1 Feb 1964 and will be included in a future change to the *Enlisted Transfer Manual* (NavPers 15909A).

• LEAVE CHANGES—General policies concerning leave regulations for *absences excused as unavoidable* are now contained in the *BuPers Manual*. Four new paragraphs were added to article C-6201. Here's what they say:

• Absent over leave — If your absence over leave *is excused as unavoidable*, it will be considered an "extension" of leave and the entire period is charged to leave.

• Absent without leave—Any *unavoidable absence* of more than 24 hours' duration is chargeable to leave.

• Absent over liberty — If your absence over liberty exceeds 72 hours the entire period is charged to leave. Absences of 24 hours or less are not charged as leave unless the entire period of absence, including authorized liberty, exceeds 72 hours. If the combined period of liberty and absence is less than 72 hours, leave is charged commencing with the time you were due back from liberty, providing, of course, the AOL portion exceeds 24 hours.

• Exceptions — Absences in the above situations which are caused by mental incapacity, detention by civilian authorities, or early departure of a ship, are not charged as leave regardless of duration, providing, of course, the absence is excused as unavoidable. Certain other unusual circumstances may occur which result in absences your commanding officer may consider as appropriate exceptions. In such cases details should be forwarded to the Chief of Naval Personnel for a determination.

BuPers Notice 1050 (dated 10 Oct 1963) notes that a memo correction to the *BuPers Manual* should be made by all commands pending receipt of a numbered change.

• ON LIFE AND LIBERTY—Navymen who drive too far too fast on overnight and weekend liberty are potential traffic hazards. So the Chief of Naval Personnel has requested that commanding officers review their policies for the control of personnel traveling on liberty outside the general vicinity of their commands.

An analysis of accidents involving death and injury of Navymen on the highways indicates that travel over excessive distances while on liberty is a contributing factor.

The Illinois State Highway Police discovered, for example, that frequently men on weekend liberty are over 1000 miles from their home base, traveling at a high rate of speed to stretch their weekend. These men (mostly young) are found to have been traveling for long hours at high speed; thus they are potential traffic hazards.

In BuPers Notice 1050 of 25 Oct 1963, the Chief of Naval Personnel advises that personnel normally cannot travel any great distance on a round trip on overnight liberty with an adequate degree of safety, or carry out their duties the following day in an efficient manner even if such travel is luckily performed without incident.

The Notice reminds COs that Art. 1284 of *U. S. Navy Regulations*, 1948, sets forth the basic regulations governing liberty. Article 1284.6 states that, unless otherwise authorized by the commanding officer, individuals must remain in the general vicinity of their command as prescribed by competent authority. The Notice also points out that BuPers Inst. 5101.2A (Navy Traffic Safety Program for Off-Duty Military Personnel; implementation of), requires commanding officers to "insure personnel understand and comply with current explicit instructions relative to permission to go beyond the specified general vicinity of unit or station and, where appropriate, consider granting adequate leave in lieu of liberty."

The Notice also states that travel by commercial transportation is generally reliable and should be encouraged in lieu of travel by private automobile. However, weather conditions, transportation schedules and similar variables should be considered before granting approval for overnight or weekend travel.

The Notice is directed toward reducing death and injury to Navy personnel.

• INSTRUCTOR TOURS—A three-year shore tour has been set for nearly 2200 Regular Navy instructor billets at certain Reserve training facilities. Establishment of the uniform tour does away with the procedure of assigning tour lengths based on standard tours for individual ratings and, in some cases, standard area tours.

Those affected are Regular Navy instructors at Reserve Training Centers, Reserve Training Facilities, and Reserve Electronic Facilities. Those who have tour completion dates of 1 Mar 1964 or later will have their tours recomputed to reflect the change.

Those with insufficient obligated service to complete a three-year tour and still have 12 months' obligation remaining should agree to extend or reenlist.

Details concerning the uniform tour, including instructions regarding various tour completion date categories, were originally announced in BuPers Notice 1306 (30 Sep 1963).

THE BULLETIN BOARD

Rates of Travel Per Diem Raised in Certain Cases, Other JTR Changes Cited

The maximum basic travel per diem rate for officers and enlisted men traveling in the continental United States has been increased from $8 to $16 per day by Change 130 to the *Joint Travel Regulations* effective 16 Aug 1963. The increased rate is payable in the following situations:

- On the day of departure from and return to the permanent duty station.
- For other days of travel by a mode other than surface common carrier.

The new rate is applicable for the actual travel performed by private vehicle provided that travel by private vehicle has been authorized as more advantageous to the government. When travel by privately owned vehicle has merely been authorized for the convenience of the traveler, per diem is payable for the actual travel not to exceed that payable for travel performed by surface common carrier ($8 except for the day of departure from and return to the permanent duty station).

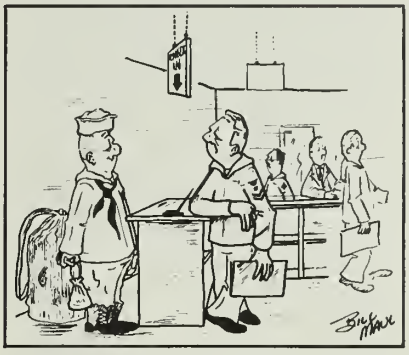
There has been no change as to the times that per diem is payable. The maximum daily amount, of course, may not be received if you travel in a group, receive meal tickets or government quarters.

Change 130 also clarified several sections of *Joint Travel Regulations*. Regulations which control shipment of house trailers after retirement, official distance between duty stations and travel to and from active duty for less than 90 days are now more specific.

Navymen entitled to a trailer allowance upon separation are told that movement of trailers must be completed within one year.

The section dealing with dependent transportation was also clarified. A Navyman who becomes eligible for dependent transportation may not move his dependents at government expense until he receives his next permanent change of station orders.

All-Navy Cartoan Cantest
William R. Maul, CT1, USN



"Running the risk of a rebuff, may I assume this to be your first duty station after recruit training?"

Four Revised, Two New Correspondence Courses Ready

Six new correspondence courses have been issued and are available through the Naval Correspondence Course Center, Scotia, N. Y.

- ECC *Communications Technician (R) 3 & 2*, NavPers 91567.
- ECC *Machine Accountant* 3 & 2, NavPers 91274.
- ECC *Gunner's Mate (G) 1 & C*, NavPers 91357-1 (supersedes NavPers 91356-A and 91357).
- ECC *Lithographer 3 & 2*, NavPers 91471-1 (supersedes NavPers 91472-1A, 91473-1A, 91470 and 91471).
- ECC *Machinist's Mate 3 & 2*, NavPers 91502-2 (supersedes NavPers 91501-B and 91502-1A).
- ECC *Fire Control Technician 2*, NavPers 91340-1 (supersedes NavPers 91340-A).

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"I guess we'll probably have ta reset it."

If You Pull Rough Duty You Can Blame That NEC You Didn't Check Out

A Navymen's NEC (Navy Enlisted Classification) may not be worth a thousand words, but it does condense a lot of information into a small space.

It is a four-digit summation of a man's special skills in addition to those generally associated with his rating. It encompasses his training in schools and on the job. It is what automatic data processing machines seek when they begin looking for the right man to fill a job which requires something extra.

As you can see, your NECs are extremely important. You may carry two of them. If they are incorrectly listed in your service record, you could:

- Make yourself ineligible for advanced training should the system in which you specialize become updated.
- Make yourself ineligible for special pay (particularly pro pay) because your NEC doesn't adequately reflect your training or capabilities.
- Be assigned to a billet for which you are untrained. If this happens, it is quite possible you and your dependents would be subjected to an unnecessary move simply because you didn't take the trouble to correct an error—perhaps only one number, in your service record.

Let's take, for example, a gunner's mate who has an NEC of 0987. He is a Guided Missile Tracking System Technician for the *Tartar* missile, Mk 11.

Another Gunner's Mate has an NEC of 0997. He is a Guided Missile System Technician for the *Talos* tracking system, Mk 7.

The only thing the two men's jobs have in common is guided missiles. It isn't hard to imagine the difficulty in which either man would find himself if the third number of his NEC were transposed.

Everyone—the Navy, the man and his family and the taxpayer would be the loser. It is even conceivable

that the national security could be irretrievably damaged.

You share the responsibility with your commanding officer of seeing that your NEC is correctly recorded on page four of your service record. A review of your service record is required annually and whenever you change duty stations. Your commanding officer is interested that entries in your record are complete and accurate and he will permit you to review it for that purpose at any convenient time.

Every enlisted Navyman should make it his responsibility to inspect his service record periodically on his own initiative with particular attention to the accuracy of his Report of Beneficiaries, page two, and the NEC recorded on page four.

Every enlisted Navyman should make it his responsibility to inspect his service record periodically, whether or not invited to do so, and take a long hard look at the NECs shown on page four. These should reflect the NECs shown on the latest BuPers Report 1080-14 received by his command.

Think back. If you have had a school or specialized on-the-job training, the chances are your NECs will be something more than four zeroes. An NEC is usually recommended for students when they complete their course. If you are a Navy school graduate, you should make certain your NEC reflects your added capability. You can do this by consulting the *Manual of Navy Enlisted Classifications* (it will be in the NavPers 15105 series).

If you need help, you can get it from your personnel officer. If, after you have talked it over, you feel an error has been made in your NECs, you should ask your command to write a letter to the Chief of Naval Personnel giving all the facts.

All-Navy Cartoon Contest
Reese E. Every, YN1, USN



"Aw quit gripin' . . . we got out of inspection."

Dictionary of American Naval Fighting Ships

The second volume of the *Dictionary of American Naval Fighting Ships* is off the presses, adding some 1800 ships' histories to the thousand-plus given in Volume I.

Volume II covers ships bearing names beginning with the letters "C" through "F". One appendix gives vital statistics on the aircraft carriers and escort aircraft carriers of the U. S. Navy; the second gives the histories of ships that served the Confederate States of America.

When the multi-volumed *Dictionary* is complete, it will contain, in alphabetical order, historical sketches and vital data of all ships that have had commissioned service in the Continental Navy and the United States Navy.

Ships which were named but not commissioned are mentioned in their alphabetical location but, usually, without historical sketches or statistical data. Appendixes will contain statistical data on 20th century ships and esoterica from the Revolution and the Civil War.

The new volume should be of considerable value to those interested in the Navy's ships, past and present. It can be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The price is $4.25.

Petty Officer's Guide Reaches Fifth Edition

A new edition of the *Petty Officer's Guide* is now available at most Navy Exchanges. This edition, like the one before it, contains excellent information on advancement, rotation, schools, customs and courtesies, leave, liberty, and travel.

A lengthy section on retirement is contained in a new chapter entitled *Useful Information*.

This is the fifth edition of the *Guide*, first published in 1953.

List of Motion Pictures Available for Distribution to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and bases overseas.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

A Pair of Briefs (2403): Comedy Drama; Mary Peach, Michael Craig.

El Paso (2404): Action Drama; John Payne, Gail Russell.

Red Skies of Montana (2405): Action Drama; Richard Widmark, Constance Smith.

King Kong vs. Godzilla (2406) (C) (WS): Melodrama.

In the Dog House (2407): Comedy; Leslie Philips, Peggy Cummins.

Carry On Regardless (2408): Comedy; Sidney James, Joan Sims.

Dementia 13 (2409): Drama; William Campbell, Luana Anders.

House of Strangers (2410): Drama; Edward G. Robinson, Susan Hayward (Re-Issue).

Manhandled (2411): Drama; Dorothy Lamour, Sterling Hayden (Re-Issue).

Tripoli (2412): Drama; John Payne, Maureen O'Hara (Re-Issue).

12 O'Clock High (2413): Drama; Gregory Peck, Dean Jagger.

Sword of Lancelot (2414) (C): (WS): Drama; Cornel Wilde, Jean Wallace.

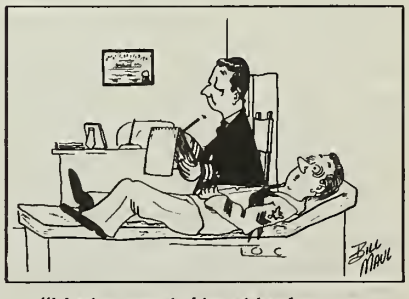
Wall of Noise (2415): Drama; Suzanne Pleshette, Ty Hardin.

No, My Darling Daughter (2416): Drama; Michael Craig, Juliet Mills.

Roommates (2417) (C): Comedy; James Robertson Justice, Leslie Phillips.

It Had To Be You (2418): Com-

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"I had creamed chipped beef on toast for breakfast—and I liked it."

edy; Ginger Rogers, Cornel Wilde (Re-Issue).

Caribbean (2419): Action Drama; John Payne, Arlene Dahl (Re-Issue).

Cheaper By The Dozen (2420): Drama; Clifton Webb, Jeanne Crain (Re-Issue).

Jack McCall Desperado (2421): Drama; George Montgomery, Angela Stevens (Re-Issue).

The Girl Hunters (2422) (WS): Melodrama; Mickey Spillane, Shirley Eaton.

Savage Sam (2423) (C): Melodrama; Brian Keith, Tommy Kirk.

Mouse On The Moon (2424) (C): Comedy; Margaret Rutherford, Terry Thomas.

Brushfire (2425): Suspense Drama; John Ireland, Jo Morrow.

The President's Lady (2426): Drama; Charlton Heston, Susan Hayward.

Broken Arrow (2427): Action Drama; James Stewart, Debra Paget (Re-Issue).

Vice Squad (2428): Drama; Edward G. Robinson, Paulette Goddard (Re-Issue).

Shoot First (2429): Drama; Joel McCrea, Evelyn Keyes (Re-Issue).

Ben-Hur (2430) (C) (WS): Biblical Drama; Charlton Heston, Haya Harareet.

A Ticklish Affair (2431) (C) (WS): Comedy; Shirley Jones, Gig Young.

Maniac (2432) (WS): Mystery Drama; Kerwin Mathews, Nadia Gray.

The Castilian (2433) (C): Melodrama; Caesar Romero, Frankie Avalon.

The Flying Missile (2434): Drama; Glenn Ford, Viveca Lindfors (Re-Issue).

A Woman of Distinction (2435): Comedy; Ray Milland, Rosalind Russell (Re-Issue).

Stage to Tucson (2436): Action Drama; Rod Cameron, Kay Buckley (Re-Issue).

The Walking Hills (2437): Action Drama; Randolph Scott, Ella Raines (Re-Issue).

The Flying Musketeers (Part 1) (2438) (C) (WS): Action Drama; Mylene Demongeot, Gerard Barray.

Wives and Lovers (2439): Comedy; Janet Leigh, Van Johnson.

Johnny Cool (2440): Melodrama; Henry Silva, Elizabeth Montgomery.

Hey, Let's Twist (2441): Musical Comedy; Joey Dee and the Starlights, JoAnn Campbell.

The Crusades (2442): Drama; Loretta Young, Ian Keith (Re-Issue).

Panic in the Street (2443): Drama; Richard Widmark, Barbara Bel Geddes (Re-Issue).

The Swordsman (2444): Drama; Larry Parks, Ellen Drew (Re-Issue).

California Conquest (2445): Drama; Cornel Wilde.

General Military Training Replaces I and E Program

The Information and Education Program, after 20 years, has been discontinued. Correspondence courses, both USAFI and Navy Training Courses, are still available but must now be ordered through the Educational Services Officer.

The information portion of the old I and E program has been expanded and will be known as general military training. General military training is in-service training dealing with military subjects and includes: customs, courtesies and traditions of the Navy, American traditions and heritage, aggressive forces, area orientation, national policy, personal affairs and naval leadership.

General military training is considered to be an integral part of naval leadership development and will be administered through the military chain of command.

The United States Navy Manual for Leadership Support, a revised edition of the present leadership manual, will soon be distributed. The manual will include general military training material and references as it applies to the broadened field of Naval leadership development. Article D-2103 of the *BuPers Manual and the I and E Quarterly Report* are also being revised to conform to the new regulations.

HOW DID IT START

Sailing Ship Still A Part of Navy Seal

In the 1700s everyone who was anyone used a seal to stamp official documents and, probably, letters home. Not satisfied with a single seal, royalty and some officials used two, three or four stamps—sometimes even a secret one.

Thus, when the Board of Admiralty was appointed during the Revolutionary War, haste was made to procure such a device. The Continental Congress approved the first Navy seal in 1780—two years before the first U.S. seal was adopted. The Navy design included thirteen stars, six white stripes, seven red stripes and a three-masted sailing ship.

The Admiralty stamp was short-lived, as was the Board of Admiralty.



When the Navy Department was established in 1798 a new design (origin unknown) was adopted to stamp commissions and other official documents. It featured an eagle behind an anchor with a partially obscured sailing ship in the background.

Because the design was not standardized by legislation, it changed through the years. The biggest change came in 1850 when another seal, also unofficial, appeared. The 1850 version greatly resembles the one now in use.

Through the years the posture of the eagle, the anchor, and the appearance of the ship in the background have varied. The variations, however, were minor, and the basic 1850 design remained in use.

At the turn of the century there was still no officially sanctioned Navy seal, though the ones in use had become fairly standardized. Then, beginning in 1926, Navy Department officials began to advocate a standard stamp.

But it was 31 years later, in 1957, before the President signed Executive Order 10736 and legalized the present design. Today it consists of an eagle perched on one fluke of a Luce-type anchor with a three-masted sailing ship in the rear.

The sailing ship flies a commissioning pennant atop the foremast, the U.S. national ensign on the main, and a commodore's flag atop the mizzen.

Pointers for You on the Registration of Births Overseas

IN THE COURSE of your Navy career chances are that your family will accompany you to a foreign duty station. And families being what they are, you may have a child born in some exotic place such as Japan or Morocco.

When this happens a few facts concerning registration of your infant may help you (and him) avoid red tape when you are called on to prove his citizenship at a later date.

If your child is born in an armed forces medical facility the procedure is relatively simple, since a large part of the paperwork will be handled by the hospital. It is, however, up to you to follow through and see that you have the proper documents when needed.

Within 24 hours after your child is born a designated officer of the armed forces medical facility will report the birth to the district U. S. consular office. (This reporting deadline may be extended as much as 10 days in unusual circumstances.)

The officer will then prepare Department of State Form FS-240 *(Report of Birth Abroad of a Citizen of the United States)*, which must be signed by either you or your wife, provided you are both U. S. citizens. For your information, this form, when signed, is sworn evidence that you and/or your wife, are, in fact, U. S. citizens.

If your wife is not a U. S. citizen, then you must sign the FS-240. If you are not available or if there is any question of your citizenship status, you will be advised to contact the consular office as soon as possible.

If for any reason the FS-240 is not filled out properly, or if the information is not available in the manner provided by regulations, the form will be forwarded to the consular office. You will then be advised to visit the office and show proof of marriage and citizenship.

A Certification of Birth will be issued free of charge when the FS-240 is executed by the consular office. This certification will suffice for the child's school entrance, work permits, etc. At your request, you can receive a copy of the FS-240 as well, for a charge of $1.50.

Additional copies of the FS-240 or Certification of Birth may be obtained at any later date from the Authentication Officer, Department of State, Washington 25, D. C. The fee is $2.50 for one copy and $1.60 for each additional copy.

Technically it makes no difference whether your child is born in a military or civilian hospital. However, if your child is born in a civilian hospital overseas you must handle the paperwork yourself. Here's how:

- Obtain several copies of the child's birth certificate (if the country issues birth certificates). (If you can't get a birth certificate or if you've lost the original, obtain a certified copy of the child's baptismal certificate. This will usually be recognized as a legitimate substitute.)
- Go to the nearest American consulate and register the child's birth. Request a Consular Report of Birth (the FS-240) and a certificate of birth (Department of State form FS-545). Citizenship papers are not necessary, since the certificate of birth (FS-545) is proof of citizenship.
- When you return to the United States, file Department of Justice Form N-600 (Application for Certificate of Citizenship) with the Immigration and Naturalization Service, which will issue that certificate after verifying the facts.

Not all overseas areas come under the Department of Defense birth registration procedure, outlined above. At present there are six overseas areas in which the registration procedure for children born to Navy families is not covered. These are: American Samoa, the Canal Zone, Trust Territories, Guam, Puerto Rico and the Virgin Islands.

These areas are either under U. S. sovereignty or are under exclusive U. S. jurisdiction and authority. Certification of birth in these territories follows local procedure in the same manner as in case of birth within a state. Birth certificates are obtained through special offices of the Vital Statistics Division, Public Health Service, Department of Health, Education and Welfare —or through local government offices.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions and BuPers Notices that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnvas

No. 40—Ordered ships to destroy certain foodstuffs which may be contaminated.

No. 41—Required that, until certain decisions are resolved by the Comptroller General, the family separation allowance would not be paid under some conditions.

No. 42 — Ordered all colors throughout the Naval Establishment to be half-masted in mourning for the President until further notice.

No. 43—Announced the death of the President and, by direction of the Secretary of Defense, ordered that colors be displayed at half-mast for 30 days and that the services carry out such other observances as their regulations provide.

No. 44—November 25 was designated by the President as a national day of mourning.

No. 45—Relayed, through the Secretary of Defense, a message from President Johnson to the Armed Forces.

No. 46—Conveyed a message of greeting to all hands in the Navy and Marine Corps from the new Secretary of the Navy.

No. 47—Discussed revisions in the Family Separation Allowance.

No. 48—Announced activation of the Naval Material Support Establishment.

No. 49—Expressed to the Naval Establishment the policy to be followed in connection with the observance of the period of mourning for the late President Kennedy.

Instructions

No. 1020.12—Discusses the possibility of placing E-5 and E-6 petty officers in service dress uniforms similar to the type worn by U. S. Navy petty officers and commissioned officers.

No. 1120.35 — Provides in one source the eligibility requirements for officer candidate programs leading to commissioned grade in the Naval Reserve.

No. 1306.73—Provides certain personnel with reassignment options as an incentive to encourage reenlistment on board present duty stations.

No. 1430.14—Describes a procedure whereby certain Class "A" school graduates who stand in the upper range of their class and who extend their initial enlistments to at least six years may be advanced to pay grade E-4 without competing in a Navy-wide advancement examination.

No. 1640.5D—Announced criteria for designation of the place of confinement by courts-martial.

No. 1740.3—Provides information concerning the availability of publications of interest to persons retiring, transferring to Fleet Reserve or being involuntarily released from active duty.

Natices

No. 1050 (10 October)—Advised of an advance change to Article C-6201, *BuPers Manual*, concerning leave policy.

No. 1412 (24 October) — Announced the Naval Reserve officer promotion zones and the convening of boards for the selection of eligible Naval Reserve line and staff corps officers on inactive duty, TAR officers on active duty and women Naval Reserve officers on active and inactive duty for promotion for fiscal year 1964.

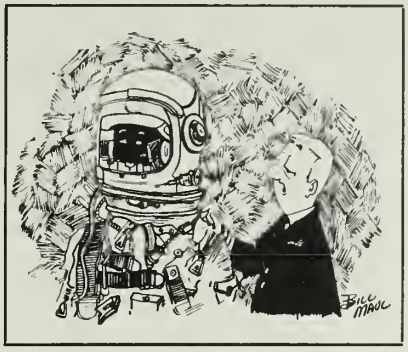
No. 1080 (29 October)—Provided for improved accountability of transient USN enlisted personnel.

No. 1430 (1 November)—Listed the names of those who will be advanced in rating to Senior and Master Chief Petty Officer in accordance with BuPers Inst. P1430.7D.

No. 1306 (4 November) — Announced new normal shore tour lengths for certain personnel commencing normal shore tours on or after 1 Feb 1964.

No. 1440 (6 November) — Outlined procedures for making changes in rating of enlisted women in the Communications Technician rating.

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"Al . . . hey, Al . . . Al, you in there, kid? . . . Al?"

No. 1418 (27 November) — Announced the schedule for Navy-wide examinations for enlisted personnel to be held in February 1964 and called attention to pertinent information regarding advancements in rating.

No. 1520 (27 November) — Invited applications from Supply Corps officers for assignment to the Subsistence Technology Course and the Transportation Management Course for the summer of 1964 and the January 1965 sessions.

Applicants Anonymous

When you order an enlisted naval correspondence course that is to be administered by your command be sure you enter your command's name and address on the application blank. The Naval Correspondence Course Center reports it is unable to deliver many courses because applicants failed to fill in this required information.

The Enlisted Correspondence Course Application (Form NavPers 231) should be checked by both applicant and endorser before mailing.

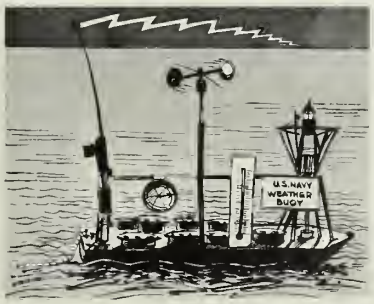
WHAT'S IN A NAME

Nomad Settles Down at Norfolk

A 12-ton oluminum buoy, locoted in front of the Fleet Weather Facility ot NAS Norfolk, aroused considerable curiosity until it was identified by Navy meteorologists os o weather buoy.

The new buoy is a *Nomad* (for Navy Oceanographic/Meteorological Autamotic Device) and represents the culminotion of 12 years of reseorch ond development by the Nationol Bureou of Standards for the Bureau of Novol Weopons.

It can be onchored ot seo ond will provide o fully automatic, comprehensive view of



weother ond oceonographic informotion from wherever it is located.

It is the first production model of o network of outomatic weother stations which will increose mon's ability to forecast meteorologicol and oceanographic dota.

While the original research buoy was being tested, it was onchored in depths up to 12,000 feet in the center of the Gulf of Mexica. Through the worst of weother, *Nomad* maintained its position ond continuously reported wind, seo and other weather conditions even during the fierce bottering given it by o hurricane.

The *Namad* buoy usually transmits on o six-hour schedule. However, if the wind increases ta speeds of over 21 knots, it puts itself an an hourly schedule. It sends out informotian on atmospheric pressure, air ond sea water temperatures, ond wind direction and speed.

Temperatures 1000 feet below the surfoce of the sea have been measured and transmitted experimentally to share stations.

The buoy is non-magnetic and its transmitter produces a maximum of 5000 watts, giving it o range of 1000 miles by day and 2000 miles ot night. The power system consists of batteries which are supplemented by wind generatars. These two sources provide sufficient power for six to nine months af operation.

Namad is naw in the production stage with seven stotions being delivered to the Navy.

The Fleet Weather Facility at Norfolk received one of the first praduction madels. Information received by Norfolk's buoy will be made availoble ta all meteorolagical services.

Laws and Regulations Pertaining to Retirement of Officers

IN the article on retirement published in last month's rights and benefits issue of ALL HANDS, officers were advised to study the laws and regulations pertaining to retirement and to their own particular circumstances.

We had hoped to include a list of such laws and regulations to assist officers in their quest for information. Unfortunately, because of space limitations, this was not possible. Working on the premise, however, that it is better to be late than not at all, we are including the list here and now.

Years Active Service	Law	Applicable to
40 or more	10 USC 6321	Officers of the Regular Navy holding a permanent appointment in the grade of warrant officer, W-1, or above.
30 or more	10 USC 6322	Officers of the Regular Navy holding a permanent appointment in the grade of warrant officer, W-1, or above.
30 or more	10 USC 6326	Enlisted men, including members who hold a permanent enlisted grade and are serving under a temporary appointment in the grade of warrant officer, W-1, or above.
More than 20, at least 10 of which have been commissioned service (Warrant officer, W-2, or above).	10 USC 6323	Officers serving in the grade of commissioned warrant officer, W-2, or above, including those who hold a permanent enlisted grade, and are serving under a temporary appointment as a commissioned WO, W-2; or above.
20 or more	10 USC 1293	Warrant officers, W-1, or above, including permanent warrant officers serving under a temporary appointment in the grade of ensign or above, and also including those who hold a pemanent enlisted grade and are serving under a temporary appointment in a warrant, W-1, grade or above.

Note: A permanent warrant officer (W-1 or above), who retires while serving under a temporary appointment in the grade of ensign or above, will be retired in his permanent warrant grade and, after his retirement, will be advanced on the Retired List to the highest grade in which he served satisfactorily, as determined by SecNav. His retirement pay, however, will be computed on the basic pay of his warrant grade or on the basic pay of the grade to which advanced, whichever provides the higher retired pay.

Statutory Age and/or Service Retirement
Male Officers (Other than Warrant Officers)

Law	Applicable to	Requirement
10 USC 6390	Permanent regular officers	Each officer below the grade of FADM will be retired on the first day of the month following the date on which he attains age 62. The President may defer the retirement of any such officer for as long as he considers advisable, subject to the following conditions: (a) the retirement of any such officer may not be deferred beyond the date he reaches age 64, and (b) not more than 10 officers whose retirement is so deferred may be on active duty at any one time.
10 USC 6371 (For RADM, unrestricted line);	Permanent regular officers	Each RADM of the unrestricted line, if not selected for continuation on the active list after 35 years' total commissioned service with five years in grade, will be retired on the first day of July immediately following the fiscal year in which he foiled of selection for continuation.
10 USC 6372 (For RADM, restricted line and staff corps).	Permanent regular officers	Each RADM of the restricted line or of the staff corps, if not recommended for retention on the active list after 35 years' total commissioned service with seven years in grade, will be retired on the first day of July immediately following the fiscal year in which he failed of retention.
Act of 11 Aug 1959 (Public Law 86-1551) The "Hump" bill.	Permanent regular officers (except officers of the Medical Corps, Dental Corps, Medical Service Corps, or Nurse Corps, during the effective period of the Act of 27 Jun 1957, PL 85-62, and LDO officers).	An officer who is considered by a continuation board convened under this act and who fails of continuation on the active list, shall, unless sooner selected for promotion, be retired on the first day of July immediately following the fiscal year in which the report of the board is approved, or on the first day of July following the fiscal year in which he completes 20 years' total commissioned service, whichever is later, and will thereafter be considered for all purposes as having been retired upon own application under the provisions of 10 USC 6323. If the repart of the board is approved less than six months before the end of the fiscal year, the retirement of the officer will be deferred until the first day of the seventh month following the month in which the report of the board is approved. Retired pay may not be less than 50 per cent of the basic pay upon which the computation of retired pay is based. An officer who has once been recommended for continuation will not thereafter be considered by a continuation board convened under this Act, but will be subject to applicable statutory retirement law as hereafter outlined.

Law	Applicable to	Requirement
10 USC 6376 (For CAPT, unrestricted line);	Permanent regular officers	Each captain of the unrestricted line will be retired on the first day of July immediately following the fiscal year in which he completes: (1) 30 years' total commissioned service, if not on a promotion list and if considered as having twice failed of selection to flag grade; or (2) 31 years' total commissioned service, if not on a promotion list.
10 USC 6377 (For CAPT, restricted line and staff corps).	Permanent regular officers	Each captain of the restricted line, if not on a promotion list and if not selected for continuation on the active list, will be retired on the first day of July immediately following the fiscal year in which the officer completes 31 years' total commissioned service. Each captain of the staff corps, if not on a promotion list and if not selected for continuation on the active list, will be retired on the first day of July immediately following the fiscal year in which he completes: (1) 30 years' total commissioned service and if considered as having twice failed of selection for promotion to flag rank; or (2) 31 years' total commissioned service.
10 USC 6379	Permanent regular officers (except LDO officers).	Each CDR, if not on a promotion list and if considered as having twice failed of selection for promotion to the grode of captain, will be retired on the first day of July immediately following the fiscal year in which he completes 26 years' total commissioned service.
10 USC 6380	Permanent regular officers (except LDO officers).	Each LCDR, if not on a promotion list and if considered as having twice failed of selection for promotion to the grade of commander, will be retired on the first day of July following the fiscal year in which he completes 20 years' total commissioned service.
10 USC 6383	LDO officers.	Each officer will be retired on the first day of the second month following the month in which he completes 30 years' active naval service, exclusive of active duty for training. Each LCDR will be retired on the first day of July immediately following the fiscal year in which the officer is considered as having failed of selection for promotion to commander for the second time. If any such officer had the permanent status of a warrant officer when first appointed LDO, he has the option, instead of being retired, of reverting to the grade and status he would hold if he had not been so appointed. If any such officer had a permanent grade below the grade of warrant officer, W-1, when first so appointed, he has the option, instead of being retired, of reverting to the grade and status he would hold if he had not been so appointed but had instead been appointed a warrant officer, W-1.
		Nurse Corps Officers
10 USC 6377	Permanent regular officers	Each CAPT, if not selected for continuation on the active list, will be retired on the first day of July immediately following the fiscal year in which the officer attains age 55 or completes 30 years' active commissioned service as computed under 10 USC 6388, whichever is earlier. Each CDR, if not on a promotion list and if not selected for continuation on the active list, will be retired on the first day of July immediately following the fiscal year in which she attains age 55 or completes 30 years' active service as computed under 10 USC 6388, whichever is earlier.
10 USC 6396	Permanent regular officers	Each LCDR will be retired on the first day of July immediately following the fiscal year in which she attains age 55 or completes 30 years' service computed under 10 USC 6388, whichever is earlier. Each officer serving in a grade below LCDR will be retired on the first day of July immediately following the fiscal year in which she attains age 50 or completes 20 years' service computed under 10 USC 6388, whichever is later.

Women Officers (other than Nurse Corps and Women Warrant Officers)

Note: Women officers of the Medical, Dental or Medical Service Corps appointed under laws other than the Act of 12 Jun 1948, or under 10 USC 5590, are governed by the same retirement laws as are male commissioned officers of the Medical, Dental, and Medical Service Corps of the Regular Navy.

Law	Applicable to	Requirement
10 USC 6398	Permanent regular officers	Each officer who holds a permanent appointment in the grade of commander will be retired on the first day of the month following the date on which she attains age 55 or completes 30 years' active commissioned service in the Navy or Marine Corps, including Reserve components thereof, whichever is earlier.

Women Officers Cont.

Law	Applicable to	Requirement
10 USC 6399	Permanent regular officers	Each officer who holds a permanent appointment in a grade below commander will be retired on the first day of the month following the date on which she attains age 50. This section does not apply to any officer in the grade of LCDR who is on a promotion list for promotion to the grade of commander, or to any officer while serving as Assistant to the Chief of Naval Personnel with the rank of captain.
10 USC 6400	Permanent regular officers	Each officer who holds a permanent appointment in the grade of LCDR will be retired on the first day of July immediately following the fiscal year in which the officer is not on a promotion list and has completed 20 years' active commissioned service in the Navy or Marine Corps, including the Reserve components thereof.
		Warrant Officers
10 USC 1263, and section 46(a) of the Act of 10 Aug 1956 (70A Stat. 638).	Permanent warrant officers (male).	Each warrant officer who, having completed not less than 20 years' active service, has attained age 62, will be retired on the first day of the month following the date that is 60 days after the date on which he attains that age. The separation of any warrant officer who, on 1 Nov 1954, was a permanent warrant officer, and who upon attaining age 62 has completed less than 20 years' active service, may be deferred by SecNav until he completes 20 years' active service, but not later than the date which is 60 days after the date on which he reaches age 64.
10 USC 1255, and section 46(b) of the Act of 10 Aug 1956 (70A Stat. 638).	Permanent warrant officers. (female).	Each warrant officer who, having completed not less than 20 years of active service, has attained age 55, will be retired on the first day of the month following the date that is 60 days after the date on which she reaches that age. The separation of any warrant officer, who on 1 Nov 1954 was a permanent warrant officer, and who upon reaching age 55 has completed less than 20 years' active service, may be deferred by SecNav until she completes 20 years' active service, but not later than the date which is 60 days after the date on which she reaches age 60.
10 USC 564;1305	Permanent warrant officers	(a) 30 years' service. Each warrant officer who has not been selected for continuation will be retired on the first day of the month following the 60th day from the date of completion of 30 years' active service. Any WO recommended by a board of officers, and at the discretion of SecNav may, upon completion of 30 years' active service, be continued on active duty with his own consent, but not beyond the date which is 60 days after the date he attains age 62. (b) More than 18, but less than 20 years' service. Each warrant officer who has twice failed of selection for promotion to the next higher permanent warrant officer grade will be retained on active duty and be retired on the first day of the month following the 60th day from the date of completion of 20 years' active service, if he has not by that time been selected for promotion to the next higher grade. (c) More than 20 years' service. Each WO who has completed 20 years' active service on the date he has twice failed of selection will be retired on the first day of the month following the 60th day from the date of his second failure of selection. (d) Retirement under (b) or (c) above may, at the discretion of SecNav, be deferred in the case of a WO serving on active duty as a commissioned officer who elects to continue to so serve, until such date as SecNav may prescribe.

You'll Live Longer, Happier, If You Install Those Belts

Almost everyone agrees that seat belts are a good idea, but there are still many Navymen who have not yet equipped their cars with them.

Last year, for example, there were more than 5000 persons killed in automobile accidents who might be alive today had they used this simple protection.

A seat belt can prevent passengers and drivers from being pitched out of a car when a collision forces doors open.

The use of seat belts is as important at low speeds as it is at high speeds. More than half of the more serious accidents occur at speeds of less than 40 miles an hour. Cars in traffic are sometime subjected to sudden stops which can throw children forward and result in their injury.

In the front seat, belts used by passengers reduce the danger of being hurled against the windshield or the dashboard in an accident, and keep the driver in place while the car is in trouble, thus giving him a better chance to maintain control.

A study made by Cornell University of actual crashes showed that people wearing seat belts suffered 35 per cent fewer serious and fatal injuries than people without them.

If the thinking Navyman computes the odds on his surviving a crash without serious injury, he will go out and buy car seat belts now.

DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionolly meritorious service to the Government of the United Stotes in o duty of greot responsibility . . ."

★ McDONALD, David L., ADM, USN, for service as Commander, U. S. Sixth Fleet from 13 Jul 1961 to 18 Mar 1963. Throughout this period of crises, ADM (then VADM) McDonald maintained the Sixth Fleet at a high peak of combat readiness at all times in supporting the maritime and naval objectives of the North Atlantic Treaty Organization. By personal direction and guidance he markedly improved the ability of surface, submarine, air, and Marine combat units to perform a wide variety of complex combat tactics in both nuclear and non-nuclear warfare. His personal diplomacy as commander of a powerful naval unit dealing with foreign military and governmental officials was outstanding in exemplifying the peaceful uses of force in critical situations.

★ SIDES, John H., ADM, USN, for service from August 1960 to September 1963 as Commander in Chief, U. S. Pacific Fleet. ADM Sides maintained his forces at a high degree of combat readiness, making a marked contribution toward the deterrence of aggression in the Pacific area. Under his leadership, Pacific Fleet Forces have responded with alacrity and efficiency during the recurring international crises, including the renewal of internal dissension and civil war in Laos, contingency operations in Thailand and Vietnam, and continuing tension in the Taiwan Strait. ADM Sides' penetrating analysis of the basic problems involved, his logical determination of the proper course to follow, and his enlightened supervision of ensuing actions, insured a positive and timely response to these emergencies.

★ BEAKLEY, Wallace M., VADM, USN, for service in duties of great responsibility during the period September 1961 to August 1963 as Deputy Commander in Chief, U. S. Atlantic Fleet and Chief of Staff and Aide to the Commander in Chief, Atlantic, the Commander in Chief, U. S. Atlantic Fleet, and the Commander in Chief, Western Atlantic. Through his comprehensive grasp of international relations and his keen understanding of strategic concepts, VADM Beakley rendered invaluable assistance to the Commander in Chief, Atlantic, during the continuing crises of this period. As Deputy Commander in Chief, U. S. Atlantic Fleet, during the Dominican crisis of 1961, the Cuban crisis of 1962, and the Haitian crisis of 1963, he assured the readiness of the U. S. Atlantic Fleet to support United States aims and strategies. He performed a monumental task in successfully preparing and deploying the Atlantic Fleet during the Cuban crisis with a minimum reduction of U. S. Naval posture in other important areas of the Atlantic Command.



LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United Stotes . . ."

★ O'BEIRNE, Frank, VADM, USN, for service during the period 30 Sep 1960 to 30 Sep 1963 as Commander Naval Air Force, U. S. Atlantic Fleet. During this period, VADM O'Beirne skillfully organized, trained, equipped and deployed the aircraft, ships and personnel of his command, making a most significant contribution to the United States military posture during the Cuban crisis of 1962. Exercising keen insight and a meticulous attention to operational requirements and the personnel needs of his command, he introduced the U. S. Navy's first nuclear-powered aircraft carrier and five new types of operational aircraft into the Atlantic Fleet while simultaneously reducing the aircraft accident rate and increasing over-all efficiency. Under his excellent leadership, re-enlistment rates increased by 67 per cent, establishing a new record.

★ KURTZ, Thomas R., Jr., RADM, USN, for service while serving consecutively as Assistant Director for Production of the National Security Agency, and as Director, U. S. Naval Security Group, from August 1958 to 23 Aug 1963. His accomplishments, most of which are highly classified, have resulted in vital and continuing improvements in the cryptologic field. In directing the Naval Security Group, RADM Kurtz exhibited keen judgment, foresight, and knowledge which contributed significantly to the operations of the Navy, and to the National Defense effort.

★ DEAN, Jack G., CAPT, SC, USN, for services during the period September 1962 to August 1963 while serving as Commanding Officer, Naval Supply Depot, Newport, R. I. CAPT Dean conceived and implemented the self-service concept for the issue of high-volume, low-cost general stores items and common repair parts, known today as SERVMART. Through this accomplishment, he has been instrumental in effecting savings to the Government of approximately $100,000 per month, in addition to untold savings in man-hours. SERVMART was such a huge success at NSD Newport, that it has been adopted at the three major continental supply centers and the Naval Shipyard, Charleston, with over-all systems savings estimated at $6,000,000 per year. Utilizing automatic data processing, CAPT Dean conceived a new method for processing stores received which has resulted in the material being available for issue to the Fleet in two to three working days in lieu of 14 days under previous procedures.



DISTINGUISHED FLYING CROSS

"For heroism or extraordinary achievement in aeriol flight. . . ."

★ ELLIS, Frank K., LT, USN, for heroism during aerial flight on the afternoon of 11 Jul 1962 while serving with Aircraft Ferry Squadron 32 (VR(F)-32), NAS, North Island, San Diego, Calif. Experiencing a failure of the elevator trim system of his jet aircraft while on a landing approach to NAS, Point Mugu, Calif., LT Ellis elected to remain with his plane long enough to avoid crashing into an on-base housing area which was situated directly in his projected flight path. Guiding his almost uncontrollable aircraft away from this populated section he finally ejected at an extremely low altitude, a moment before the plane crashed into an open field. Although sustaining serious injuries, LT Ellis, by his selfless and decisive action, undoubtedly prevented loss of life and property in housing area.

TAFFRAIL TALK

GERALD ZINSER, now of Winter Park, Fla., was a petty officer in *PT 109* serving under John F. Kennedy during World War II. He figures in an incident that occurred during the ceremonies for the late President, which points up the close association of PT sailors and their families.

When Zinser heard of the President's death, he immediately determined to attend the funeral. Thousands of other people, of course, had the same idea, and most of them far outranked Zinser, who is now a postal employee.

Friends of the PT boat Navyman got in touch with his Congressman who, in turn, got in touch with the Navy. Responsible officials promised to do all they could.

They did quite a bit. The Navy met Zinser at the airport, and furnished him with transportation—a car and a driver. He was taken to the Capitol and paid his respects to his former skipper at the late President's bier.

Meanwhile, the word had been passed at the White House, and Mrs. Kennedy took time from her infinite duties to request that Zinser be provided a family ticket for the church services.

It was a small incident among the hundreds that happened at this tragic time, but it leaves a warm feeling for the consideration shown by Mrs. Kennedy to a former shipmate of the late President.

★ ★ ★

The impact of President Kennedy's death on people all over the world was similar to that felt by citizens of the United States. Here are some samples witnessed by Navymen in the Far East:

Minutes after the tragedy, a Navyman on leave in a remote village of Japan was approached on the street by an elderly woman who spoke no English. A fellow Japanese translated her words of sympathy to the American sailor and added his own.

In Hiroshima, U. S. sailors watched, then joined, students from Universities and colleges in and around the city as they stopped to pray for the American President.

The mayor of Iwakuni conveyed the sympathy of the city's people to the commander of the Marine Corps Air Station there and Japanese priests offered a requiem mass for the President.

In the chapel at Kamiseya's naval station, flowers decorated the altar during a memorial service for the President. These were the silent tribute of the Japanese employees who worked at the station.

★ ★ ★

Struck down at the same time as John F. Kennedy was John Connally, who was Secretary of the Navy during 1961. Seriously injured by the assassin's bullets, he is now on the mend. Navymen throughout the Fleet extend to their former SecNav and former shipmate (he was a Naval Reserve officer in World War II) wishes for a complete and speedy recovery.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwards of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor. DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

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● **AT RIGHT: IN MEMORIAM—Notional ensigns throughout the Fleet flew at half-mast for 30 days in memoriol to the late President John F. Kennedy. Shown here is the ensign aboard nucleor aircraft corrier USS Enterprise (CVAN 65).**



a tribute to

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In WAR and PEACE

D 208.3:365

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



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FEBRUARY 1964



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

FEBRUARY 1964 Nav-Pers-O NUMBER 565

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistant Chief for Morale Services

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• **FRONT COVER:** HE'S COVERED—The Navymon shown on this month's cover of ALL HANDS is First Class Personnelman James T. Rabbitt, USN, currently on duty in the Bureau of Naval Personnel. Photo by Walter Seewald

• **AT LEFT:** PLANE LOADED—The ottack aircroft carrier USS Ranger (CVA 61), her flight deck "decorated" by members of her crew and a variety of aircraft, prepares to enter port at Pearl Harbor, Hawaii.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated. Photos at bottom of page 3, copyright by CULVER, reprinted with permission.





NAVY RELIEF SOCIETY offered emergency funds to evacuees from Cuba and *(rt.)* families of sailors lost aboard Main

Six Decades of Good

THE WAR WITH Spain was of recent memory and the year 1904 was only 23 days old when a group of men and women, all prominent in their day, met in Washington, D. C., to incorporate a society.

The purpose of their organization was: "aiding indigent widows and orphans of personnel of the United States Navy and Marine Corps."

The name of the organization was to become well known. Paragraph one of the certificate of incorporation stated it was The Navy Relief Society.

The founders were Navymen, Navy wives or persons who were otherwise interested in the Navy. Perhaps the most popular figure among them was Admiral George Dewey, the hero of Manila Bay. The admiral was an early president of the Society and served in that capacity until his death in 1917.

The organization had tough sledding for a time. Its members contributed $25.00 when they joined the Society and made annual contributions thereafter. Although the sum of $25.00 doesn't seem to be a sizable bit of money in the year 1964, it had an impressive buying power in 1904.

For many years, the Society received a portion of the gate receipts of the Army-Navy football games. This source of revenue became a major portion of the Society's income and Admiral Dewey com-

HELP FOR NAVY families is at hand via Navy Relief Society whether emergency is at home or abroad.







KIN of *Maine* dead received money.

Deeds



A GOOD FRIEND — Navyman visits Navy Relief Society officer for help.

mented in a letter dated 1 Jan 1910 that the cancellation of the previous year's game at Philadelphia deprived the Navy relief fund of about $7000 in revenue. He also mentioned generous contributions from the Fleet in the amount of $2000 and asked for membership subscriptions to help keep the Society afloat.

THIS WAS AN ERA in which anyone who was down on his luck was down indeed. The Society's files of aid given to Navymen and their families in the years preceding World War I record hardships that are difficult for most people to conceive today.

It was an era of rugged individualism in which the public at large gave very little thought to municipal care for the unfortunate. Benefits for veterans and their families were virtually non-existent and rights and benefits such as today's Navy offers its men and their families were few and far between before World War I.

One of the Society's first opportunities to alleviate the hardships of Navy families came a few weeks after its incorporation with a disbursement of $1695 to the families of those Navymen who died when the battleship *Maine* was destroyed in Havana Harbor shortly before.





EARLY BACKERS—Mrs. Higginson was first president, then ADM Dewey carried on until 1917. *Below:* Caruso gave a benefit performance at end of WW I.











IN NEED—NRS nurse makes WW II call. *Rt:* NAS Corpus Christi holds festival and beauty contest to raise funds.

Later the Society disbursed its money to provide pensions for Navy widows and orphans. Many were sent to schools to learn an occupation which would make them self-supporting. For those who needed a helping hand temporarily, the Society bought food for the hungry and fuel for cooking and for warmth.

AS TIME PASSED, the Society's needs for money increased and the sailors in the Fleet became more active in what had been more or less an exclusive group of contributors to provide funds for the Relief Society.

Navy Day carnivals were given to which admission was charged and at which ships were dressed and illuminated.

The paying customers were taken aboard ships and shown methods of Navy messing and berthing; how hammocks and seabags were stowed; how food was prepared and dishes were washed in the galley; and how the incapacitated were cared for in the sickbay.

Gun crews drilled and there were exhibitions which included street riot drills, wall scaling and sham battles.

At one carnival, there were four bands which provided a continuous flow of music all day and, at night, the carnival scene was lighted with searchlights and lanterns.

World War I increased the demands made upon the Navy Relief Society, and it responded to the needs of Navymen's families as it had done after the Spanish-American War. By this time, however, the Society's financial capabilities were vastly improved for handling emergencies.

SINCE WORLD WAR I, benefits for Navymen and their families have been increasing and the nation has become more conscious of its debt to the men who fight to preserve its liberties in time of war.

However, Navymen, like everyone else, still have emergencies which are unforeseen and for which they are consequently unprepared.

Unfortunately, despite the benefits for which the law and the Navy provide, there are still cases of hardship, for example, when a Navy father dies without providing for his survivors as perhaps he should have.

In 1907, the Navy Relief Society began receiving reports of Navymen who died. It still receives such reports concerning both active duty and retired Navymen. After a Navy death becomes known, the Society contacts the widow to offer its assistance.

An outstanding example of the Society's prompt aid to widows and orphans occurred in 1923 when 11 destroyers were wrecked in a stormy, fog-shrouded sea off Honda at what is now the Naval Missile Facility at

Here Are Some of the Ways the Navy Relie

For Navymen who aren't quite sure what kind of situation merits the Navy Relief Society's aid, here are a few instances under which financial assistance may be granted:

- Where a man has lost his life and his widow, minor children or dependent parents need help in obtaining basic necessities before government benefits begin. The Society also assists the widow to obtain transportation to return to her family or it pays for vocational training to make her self-supporting.
- The Navy Relief Society will help keep a deceased Navyman's children in elementary or secondary public schools if their education might otherwise be curtailed because of their father's death. Sometimes provisions can be made for special training of handicapped children.
- The Society also helps meet emergency non-recurring expenses such as medical care, funeral expenses or, at times, even basic maintenance until government benefits have been received.
- The Society also helps retired Navymen and their dependents to pay maintenance expenses when their dependency allotment has been delayed and in other emergency situations which leave families temporarily stranded financially. Aim is to get them back on their feet.





FOR THE CAUSE — Early Army-Navy football games were a big source of income. This one was held back in 1911.

Point Arguello, Calif.

Thousands of dollars were raised by the people of San Diego and other nearby communities and turned over to the Navy Relief Society for disbursement.

Immediately after the disaster, the Society, without waiting for additional funds, had ascertained the financial conditions of the dependents of those who died in the disaster and was able to distribute the funds equitably.

THERE HAVE BEEN numerous instances in which the Society has helped the families of Navymen who have gone to sea without making allotments for their families. Sometimes allotments have been made but not received. The Society has stepped in with cash to keep wives and children afloat until money started coming in again.

These, of course, are only a few examples of the Society's assistance. The annual reports of the Navy Relief Society for the past 60 years are replete with instances in which Navymen and their families have been given assistance ranging from moral support to substantial interest-free financial assistance to help them over the rough road to self-sufficiency.

It is difficult for Navymen to be located where the Navy Relief Society does not have a representative within shouting distance. It has had auxiliaries from Constantinople (begun in 1923) to the China Station in the days when these faraway places were far away indeed.

When the Navy-leased base in Constantinople was suddenly closed in the twenties, 166 Turkish wives of Navymen were left stranded when their husbands were unexpectedly ordered from Turkey.

The Navy Relief Society loaned them money with which to travel to the United States to rejoin their husbands and arrangements were made by the Red Cross for special steamship rates. It wasn't long before the families were together again.

Throughout the years, supporting the activities of the Navy Relief Society has been a favorite cause of many people from the Commander-in-Chief to the lowest-ranking Navyman. Even the great tenor voice of Enrico Caruso supported Navy Relief in a program in New York's Hippodrome at the end of World War I when the Society's responsibilities were especially great.

It might be said for Mr. Caruso and the others who participated in the program that night that more than $33,000 was realized.

In 1904, the Navy Relief Society was first incorporated for a period of one thousand years. This was later changed to "in perpetuity." The Navy Relief Society will be around for a long time to lend a helping hand to Navymen and their families when they need it. —Bob Neil

Society Can Assist You and Your Dependents

The Society also lends (without interest) or grants money for these:

- Funeral expenses of dependents up to $400.
- Travel in special cases involving critical illness or death.
- Hospitalization for an active duty Navyman's dependents in cases where government facilities are not available or in which they cannot be utilized.

In addition to monetary relief, the Society also is ready to help with the services of a Navy Relief nurse; with transportation problems; securing housing; obtaining information about dependency allowances, pensions and government insurance; communicating with Navy personnel about community resources such as help for retarded or crippled children, the blind or the deaf.

Although these are instances which make up the bulk of the Navy Relief Society's work, they are by no means the only instances under which a Navyman can turn to the Society for help.

Navymen in trouble can rest assured that their problems will be considered sympathetically by the Navy Relief Society and that an attempt will be made to resolve them on the side of liberality rather than parsimony. For the location of Navy Relief Society activities, see p. 54.

Command Ship—A New

NEWLY CONVERTED USS *Wright* (CC 2) is a combatant ship, yet she is not designed to sink, chase, find, follow or even scare the enemy. Although she is as large as a light cruiser her armament is limited to four 40-mm guns—less firepower than carried by an icebreaker.

Wright represents a relatively new idea in modern warfare: the command ship concept. From her decks, joint command staffs can control task force and fleet operations anywhere in the world. She carries the most extensive communications facilities ever installed aboard ship, and can handle as many messages as a major shore facility.

The ship has little need, and less space, for guns. *Wright* will be protected by the aircraft and guns of the task force with which she operates.

Until recently the idea of an unarmed flagship was absurd. In fact, the fleet commander usually embarked in the biggest, most powerful ship under his control. According to theory, the task force commander could best lead his group into battle from the bridge of the most heavily armed ship. This is no longer so.

EARLY AMPHIBIOUS ASSAULTS during World War II gave birth to the command ship concept. Task force commanders, controlling landings on heavily defended beachheads, found coordination limited by the communications facilities at their disposal.

Unfortunately, the problem could not be solved by simply adding communications equipment. Space was not available for both heavy gun batteries and the needed electronics gear; something had to go.

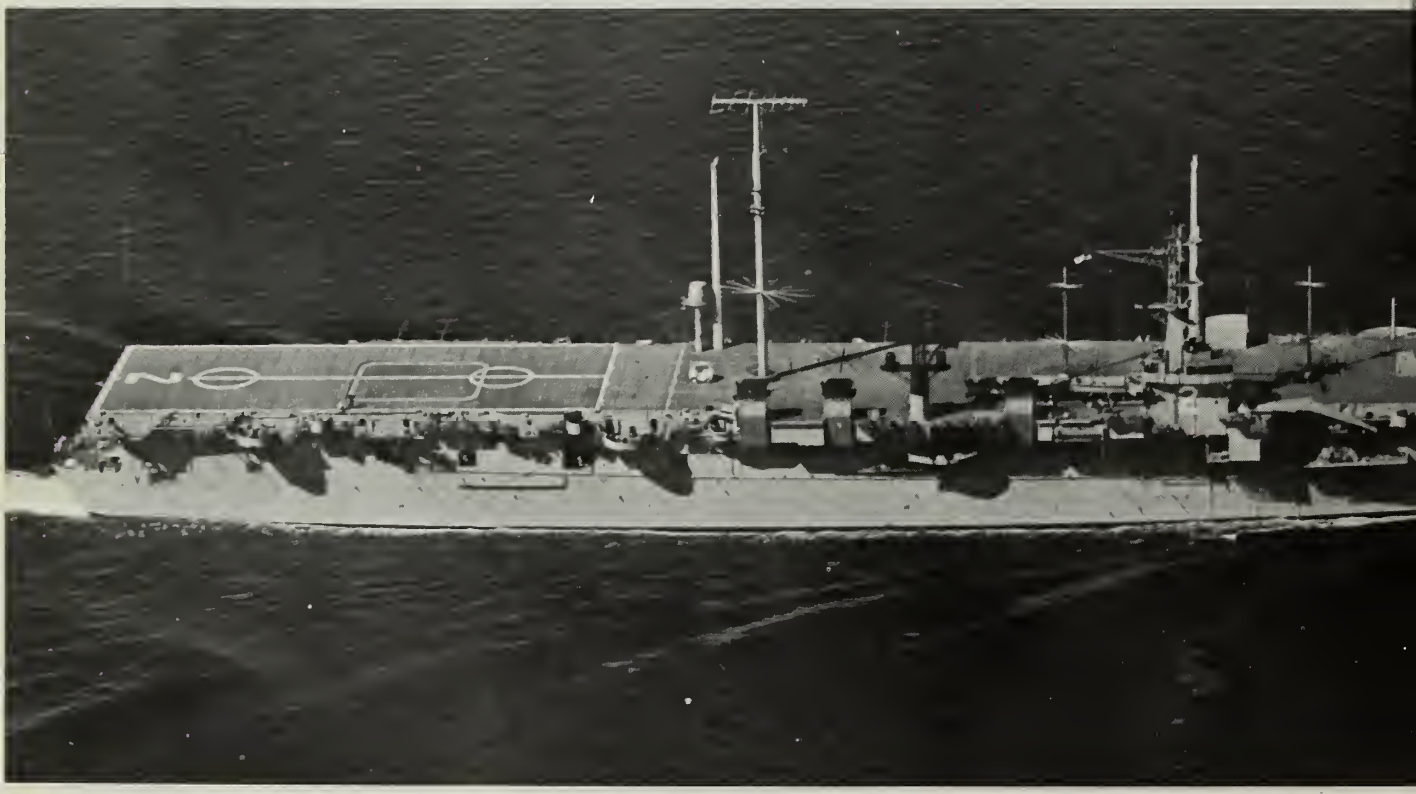
The British were the first to take the step. In 1942 they converted a merchant ship to an amphibious headquarters command ship. The mission of this ship was communication and coordination. Its main battery—radio. One year later the U. S. Navy launched its first amphibious command ship.

Amphibious communications ships were widely used during the remainder of the war, but the command ship concept was not applied to other Fleet operations until 1953. During that year, sparked by the success of the amphibious ships, USS *Northampton* (CC 1) was launched with the most extensive communications equipment ever put to sea at that time. Even *Northampton*, however, carried guns. Her armament consisted of four 5-inch and eight 3-inch guns.

THERE IS LITTLE SIMILARITY between *Northampton* and the more recently converted *Wright*. *Northampton* does not look radically different from other, more conventional Navy ships, except for her large number of antennas. But *Wright* is a different matter. One of the weirdest-looking ships in commission, her antenna masts, which protrude from the flight deck, make her identification easy from any angle or distance.

Wright retains her wooden flight deck, renamed the antenna deck. Two fiber glass antennas stand over 150 feet above the center of this deck, while three slightly smaller antennas line the port side opposite the island. Whip antennas, used in local

TAKING COMMAND—*USS Wright* (CC 2), converted from a WW II carrier, still has some flight deck left for copters.



Concept

communication, extend outward from the edge of the flight deck.

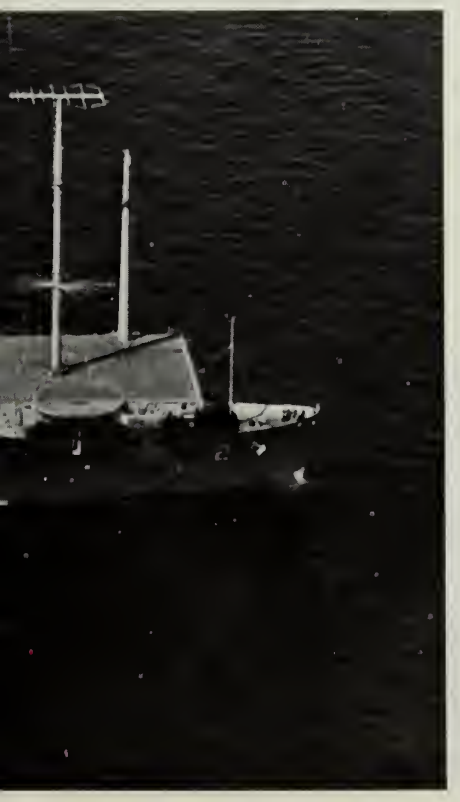
The communications ship has not completely abandoned the airdale Navy, however. The after third of her flight deck is free of antennas, and is used to launch and recover helicopters. The ship can carry up to three helos.

Below decks, command spaces are not different from those used ashore. One entire wall is devoted to large status boards and maps which are mounted on tracks and may be quickly rolled into view. There are compartments for war operations, plotting, emergency action, briefs and theatre presentations. An entire room is devoted to the ship's teletype printers. Each printer can record incoming messages at 100 words per minute.

Wright was converted on the West Coast, but is expected to join the Atlantic fleet sometime before Christmas of this year.

Saipan, Wright's sister ship, is presently being converted on the Gulf Coast and will become CC 3.

WRIGHT has only four 40-mm guns.



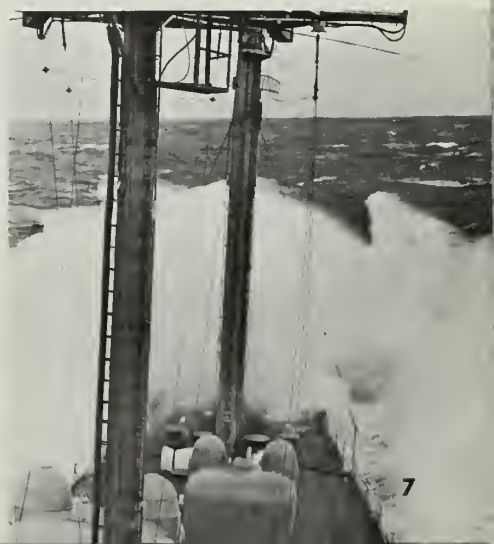


UNIQUE ONE—Deck studded with antennas gives *Wright* an unusual appearance. *Below:* AGC of WW II was the beginning of the command ship concept.



FLAG PLOT and forward antenna of *USS Northampton* are shown below.





TAKING ON *TALOS*—PacFleet AE highlines *Talos* missile to *USS Oklahoma City* (CLG 5) during replenishment at sea.

Pass the Ammunition

ANY SCHOOL KID can tell you it isn't smart to play around with live ammunition. Men in the Navy's ammunition ships couldn't agree more. They never play around with it; they handle it with care.

Navy AEs carry any and all types of ammunition, weapons and guided missiles. They also have plenty of power equipment available for transferring their cargoes to Fleet ships that can deliver it on to the enemy.

The lethal cargoes of ammunition ships are lifted from scrupulously clean holds on hydraulic and electric elevators through hatches which open and close hydraulically.

Electric fork lifts and dollies are used for hauling both ammunition and the ship's provisions while cargo is stored by nylon web belts combined with aluminum stanchions.

About the only time AEs are found in port is when they themselves are being replenished. At other times, they are at sea where they can transfer ammunition to fighting ships at the rate of over 100 tons an hour.

Needless to say, AEs must have some rather special gear to accomplish this and it isn't difficult to find. One look at the deck of an AE will show the observer that six large king-



USS Haleakala (AE 25)



USS Rainier (AE 5)



USS Mauna Kea (AE 22)



USS Firedrake (AE 14)

posts frame a spiderweb of steel wires and manila lines.

In each kingpost there is a counterweight tensioning highline trolley device known to AE men simply as the CWT. It consists essentially of large weights mounted like elevators inside each of the kingposts. The weights keep the transfer line taut between the AE and the receiving ship by compensating for the roll of each ship.

The CWT is usually needed because AEs can't wait for ideal conditions to make their transfers. An AE deployed for five months in the western Pacific, for example, usually must steam more than 30,000 miles to conduct alongside operations with more than 50 ships.

AE men never forget their cargo is safe only as long as they remember it is dangerous. The design of the AE also respects cargo safety. The 512-foot ships are built in sections, each separated from the others by heavy steel bulkheads to limit any possible disaster.

A news commentator might term the presence of an AE an explosive situation – an opinion apparently shared by port captains, for ammunition ships usually occupy the last anchorage to seaward.

AE men aren't perturbed that their ships are considered potential hazards. The way they figure it, every combat vessel carries explosives, and the safety conscious crews of the Navy's ammunition ships are better equipped to handle them.

Regardless of their apparent safety, AE crews will probably continue to go ashore via the liberty boat instead of stepping down the brow.

—Gerald R. Boling, JO1, USN



USS Pyro (AE 24)

USS Mount Katmai (AE 16)



USS Vesuvius (AE 15)



USS Paricutin (AE 18)



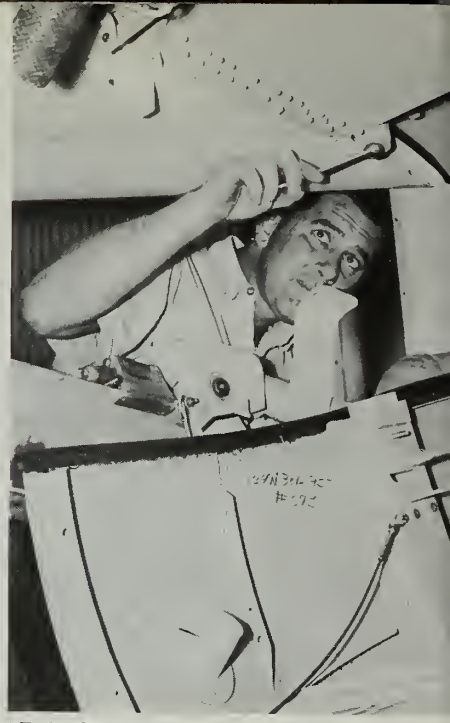
USS Mount Baker (AE 4)





OFF SHE GOES—Navy Q2C drone target takes off from pad with the assist of JATO. *Below:* Subject of Utron Five studies were these new drone targets.





AT WORK—AMS1 assembles Q2C.

UTRON

BY THE SUMMER of 1963 the Navymen of Utility Squadron Five (Detachment Bravo) had become past masters at the art of flying and fixing the KDA drone target aircraft. For several years they had flown the pilotless aircraft from Naha, Okinawa, over the antiaircraft guns of the Seventh Fleet, fished them out of the water, decontaminated and put them together again.

And then, in July Utron Five ground crews found their experience with the KDA just about worthless. The Navy had decided the KDAs were obsolete and had replaced them with the Q2C drone. The Q2C was newer, better, more sophisticated—in short, extremely different.

So the ground crews abandoned their tool boxes, picked up their books and went back to school.

The first four weeks of the school consisted of classroom study. Four officers enrolled in the target supervisor and remote control course, which taught them to fly the drone from the ground. A major portion of this course dealt with general knowledge of the target aircraft.

The six direct controllers were instructed on how to start the drones, monitor them, and make sure all systems are "go" before the launch.

AN AIRFRAMES and engine mechanic's course was taken by 11 men.





IN TRAINING—Navymen of Utility Squadron Five at Okinawa learn maintenance procedures for the new drone.

FIVE STAYS ON TARGET

It covered the details of the new drone's engine and hydraulic system, for which they would be responsible once the new aircraft began to fly. In addition to normal maintenance these men disassemble, decontaminate and reassemble the drones after they are recovered from the ocean.

The 11 men also learned to perform weight and balance checks on the drone and to mount it on the ground launch rails. They were taught to align the jet assisted take off (JATO) bottles which lift the aircraft off the launching rails, adding a thrust of 11,000 lbs. Special attention was paid to the JATO phase of training—a mistake of .006 of an inch in alignment of the bottles may cause a 15 degree roll when the aircraft is launched.

Instrumentation technicians were taught to monitor the drone's flight from the ground. They learned to use the instruments which tell the drone's air speed, engine speed and altitude while the target is in the air.

TWO RADAR augmentation technicians learned to operate the traveling wave tube (TWT) amplifier, one of the Q2C's new features. Controlled by the two men the TWT can simulate, on the radar screen, any target size desired.

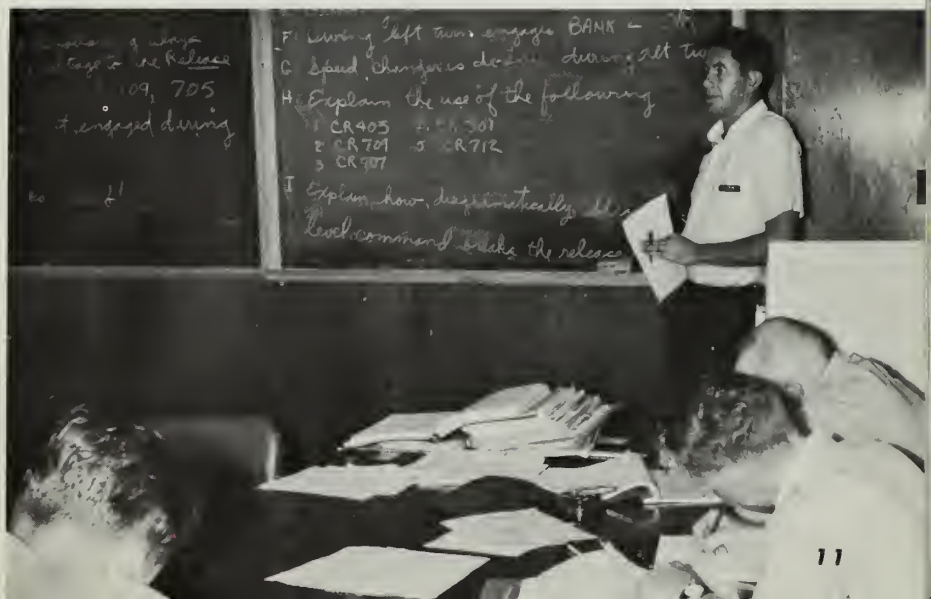
The most detailed course taught during the training period involved the operation of the test equipment, especially the basic systems console.

This console, when connected to the drone, provides electrical inputs and reads the outputs of the target's electrical system. It can test anything on the target aircraft under almost every conceivable flight condition, while the drone remains on the ground. The console carries automation to its logical conclusion—before testing the aircraft, it tests itself.

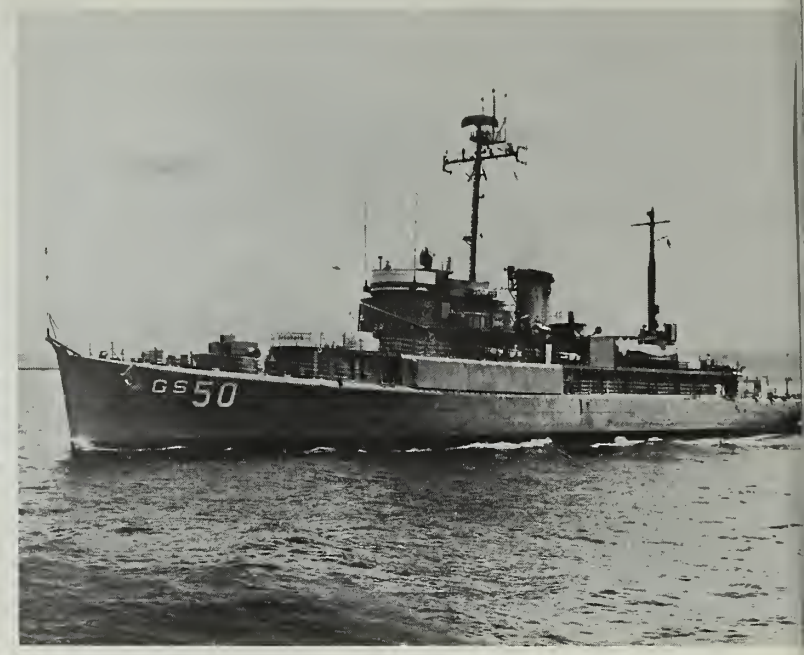
After spending four weeks in the classroom the VU-5 Navymen again went to work with their tools as they began the practical phase of instruction. Under guidance of the instructors they began actually working on the drone. For a month they disassembled, put together and again disassembled the engine and airframe until they had the whole system down pat. This period finished their training and they launched their first Q2C drone.

The instructors packed their gear and prepared to return to San Diego. Utron Five began full operation and, after eight weeks, Seventh Fleet gunners again have targets at which to shoot—until the Q2C becomes obsolete. —Bill Lawrence, JO2, USN.

BOOK LEARNING—Target men receive the word on the operation of the Q2C.







DEEP WATER trawl is lowered over side of *USS Rehoboth* (AGS 50). *(Rt.)* The surveying ship cruises in western Pacific.

Mobile Science Lab

SCIENTISTS who probe the oceans for information only the sea can provide are getting a big assist from USS *Rehoboth* (AGS 50).

Operating out of Pearl Harbor, the oceanographic research ship is contributing much toward a thorough scientific study of Pacific waters.

At present *Rehoboth* is gathering information concerning the physical and chemical properties of sea water, the characteristics of underlying sediments, the life which the sea contains, and its overlying air masses.

During her oceanographic surveys, *Rehoboth* collects and examines water samples taken from depths as great as 3000 feet.

Physical observations are made to determine such characteristics as pressure, temperature, and salinity of water at various depths. This helps determine the varying speeds of sound through water.

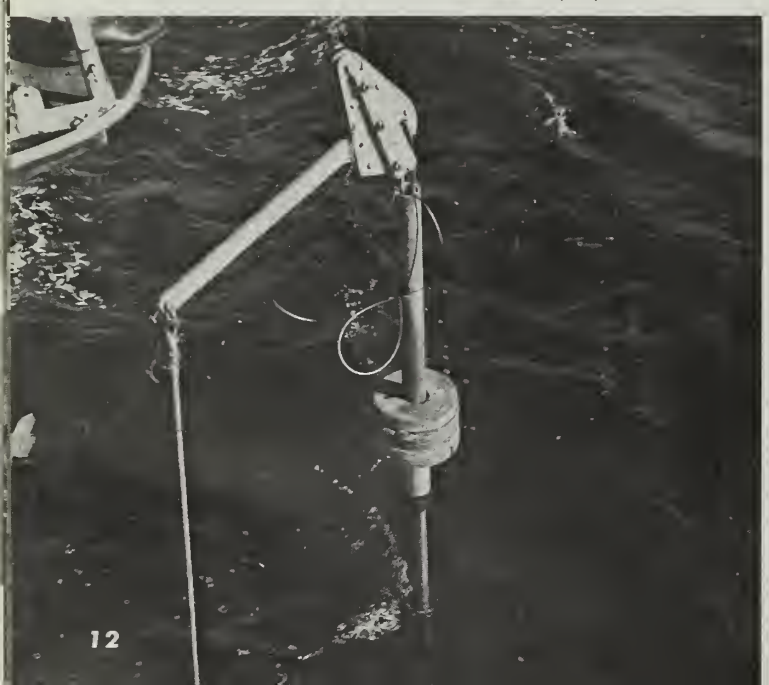
The water is analyzed to determine its chemical constituents. The amount of salt is measured, an important step in determination of density.

Occasionally *Rehoboth* is called upon to collect samples of marine life of various sizes at various depths. Cone-shaped nylon or silk nets are used to bring up plant and animal life suspended in the water.

Geological studies of the ocean's bottom help determine the type and age of sediments, and organisms.

The ship uses clamshell-like buck-

CORER DEVICE is lowered into the ocean. *(Rt.)* Weather balloon is released from *Rehoboth* off coast of Japan.





ets (called grab samplers) and corers, which are long pipes driven into the sediment, to bring samples to the surface for study.

Information concerning the structure of the bottom sediment is obtained with the help of a deep-sea camera. The ship's photo lab can process film and produce prints or transparencies for immediate use in analysis.

Rehoboth also collects meteorological data which she provides for Fleet Weather Centrals throughout the Pacific. Each hour, each day, the ship sends two weather balloons up for atmospheric observations.

WHILE carrying out her oceanographic data collecting, *Rehoboth* has visited some of the remotest parts of the Pacific. She normally operates independently.

Rehoboth has worked along the Aleutian Chain, and in waters near Kamchatka and Sakhalin, USSR.

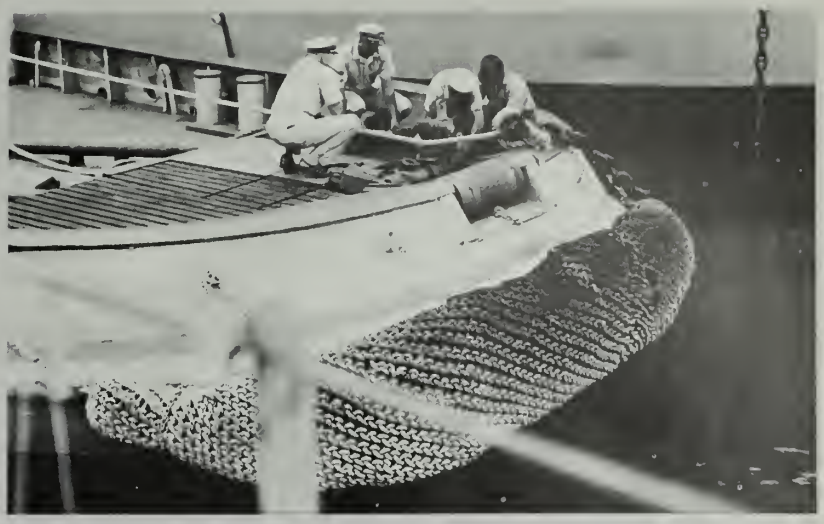
Last November she visited Nakhodka, Siberia.

Occasionally, *Rehoboth's* crew has a "first" to boast about. The ship has discovered mountains as high as 8000 feet under the sea. She has traced the Gulf Stream for hundreds of miles and, on several occasions, has held the records for the deepest photographs ever taken, and the deepest anchoring ever accomplished.

Rehoboth is an ex-seaplane tender converted for special oceanographic research work. She measures approximately 310 feet in length, 41 feet across the beam, and displaces approximately 1695 tons. The ship is operated by Commander, Service Force Pacific, and comes under the technical control of the Commander, United States Naval Oceanographic Office.

She is unarmed. Her weapons were removed during conversion to make room for special survey equipment and laboratory space. She does, however, have plenty of manpower. Her complement is 12 officers and 157 enlisted men, including aerographer's mates, sonarmen and draftsmen.

As many as 10 civilian scientists also work full time on board *Rehoboth*, rounding out a staff of Navy and civilian scientists who know what to look for in the sea, and who can scientifically analyze what they find. —Norman Worra, JO2,



THE HOOK-UP — Towing lines are shackled to bridle of barracks ship.

No Job Too Tough for Samoset

Although Navy tugs are usually the beginning and end of most Fleet operations, they are frequently called upon to maneuver much less spectacular charges than Fleet ships.

Getting a barracks ship out of New Orleans to Newport News, Va., is a case in point. The ship *APL 53* had been nudged and towed out of New Orleans' busy Industrial Canal by harbor tugs to a berth alongside USS *Samoset* (ATF 190).

Samoset's crew inspected the APL's heavy chain bridle to make sure both ends were secured to each side of the barracks ship's bow. The bridle was then pulled onto the tug's fantail and shackled to the heavy wire towing lines.

The lines were double checked to make certain the tow couldn't break loose at sea and, with one long and two short blasts of her whistle, *Samoset* cast off, maneuvering the APL slowly into the mid-stream of the Mississippi.

When she was clear of the pier, *Samoset* dropped the lines holding her alongside the APL and, using the river current and her engines, eased slowly astern, completing a 180-degree turn to a position directly ahead of her tow ready to take a strain.

Samoset's crew took care not to entangle the towing lines and the bridle as the tug eased forward until the tow line became taut. She then made her way down stream through the channel to the Gulf of Mexico.

Samoset arrived six days later at Newport News with her barracks ship in tow—the end of the first leg of the APL's trip overseas where it will house *Polaris* missile technicians.

—E. S. Pope, JO2, USN.



BIG TOW AFT — *Samoset* gets in position to begin her long journey.

Old Ironsides



OLD IRONSIDES lies at her pier in Boston under the shadow of the Bunker Hill monument and a mile from where she was launched 167 years ago. Now a floating museum that attracts half a million tourists a year, to Bostonians she is an heirloom of early New England, as well as a sacred piece of Massachusetts real estate. But to the 45 Navymen who are her crew, she is their ship.

USS *Constitution* (IX 21) is the Navy's oldest commissioned ship afloat. She fought the French in 1798, the Barbary pirates in 1804 and the British in the War of 1812. In all her battles, she never knew defeat.

Boston's pride in the frigate is well founded. *Constitution* was built there in 1797. Her birthplace, now the site of the Boston Coast Guard Station, is across the harbor from her permanent berth at the Naval Shipyard. Bostonian Paul Revere furnished much of *Constitution's* copper and composition hardware. In his foundry were produced the bolts, rods and

ANNUAL CRUISE — *Ironsides* is towed into harbor to change position. *Above:* She enters dry dock for overhaul.



Sails Again

other fastenings, plus the copper sheathing for her bottom.

When her fighting days were over in 1823, *Constitution* was returned to Boston. Although most of her timbers were sound, her planking and decks were badly decayed. She was pronounced unseaworthy in 1830 and the Navy Department decided she should be sold or scrapped.

In protest against the decision a young Bostonian, Oliver Wendell Holmes, wrote a poem called "Old Ironsides." The poem was published in newspapers across the country and precipitated such a public outcry that *Constitution's* death warrant was quickly withdrawn and funds were appropriated for her restoration.

For the 32 years that *Old Ironsides* was a fighting ship, her crew of 475 officers and men were recruited primarily in Boston. Today, her crew may come from any of the Navy recruiting stations across the nation.

DUTY ABOARD IX 21 is similar to that in any Naval ship, except that it is not considered sea duty. Assignment opportunities are limited, since there are billets for only certain rates and ratings.

A lieutenant junior grade is the commanding officer, and the executive officer is a chief boatswain's mate. Other ratings currently represented are quartermaster, damage controlman, storekeeper, yeoman and personnelman.

Non-rated men come to *Constitution* directly from the Naval Training Center at Great Lakes. Before assignment they go through a rigid selection process, and only the best men are considered. A special type of sailor is required to discuss the history of the ship with the visitors who come aboard.

Constitution is normally open to the public seven days a week the year around. In December, however, *Old Ironsides* went into drydock for major restoration, the first since 1930. Until 28 Mar 1964, she will be open only on week-ends and national holidays.

The summer months are usually the busiest for *Old Ironsides* sailors. According to the Greater Boston Chamber of Commerce, the ship is a major attraction which draws tourists to New England from all over the country. On summer weekends 4000 visitors daily is not uncommon. On Armed Forces Day last year some 8000 visitors toured the historic old frigate.



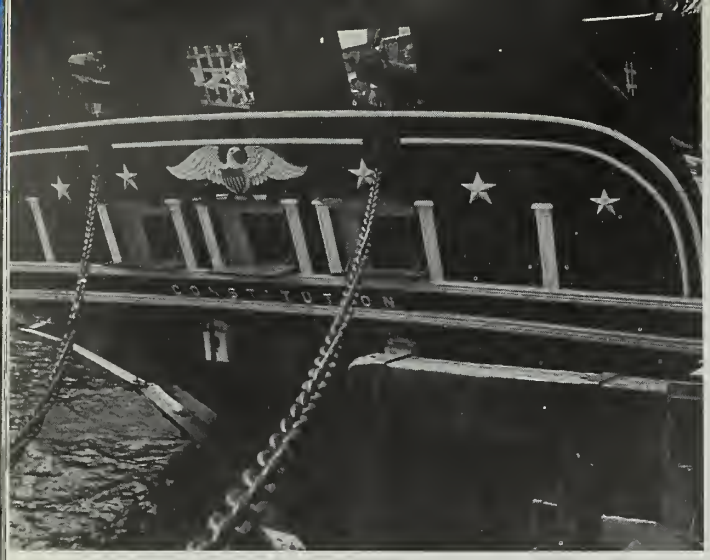
DAYS OF GLORY — Painting shows *Constitution* defeating *Guerriere* in 1812.

During visiting hours the duty section is spread throughout the ship to assist the visitors and answer questions. Their presence also discourages souvenir hunters who would like to take part of the historic frigate home with them.

IN ONE RESPECT, life aboard *Constitution* has not changed in 167 years: There is still brass to be shined and decks to be swabbed. The working day begins early and, when the gates open at 0930, the ship is sparkling and ready for visitors. When visiting hours begin the crew put aside their dungarees and cleaning gear to assume their dual role

MODERN TOUCH — Part of the present-day crew musters on historic deck.







LOOKING SHARP — Crew of *Constitution* keeps her looking 4.0. *Rt:* Old painting shows launching in 1797.

of curators and tour guides.

When visiting secures at 1630 the duty section musters beneath the towering masts, which once held aloft 47,000 square feet of sail. The men remain on board overnight and stand the necessary watches.

The only area of the ship which has been modernized is the third deck, which is closed to the public. Once a storage area for bread, water and gunpowder, it is now the crew's working spaces and quarters. Although their predecessors slept in hammocks, *Constitution* Navymen today have metal bunks, showers and other conveniences usually available aboard ship. Even electric blowers have been added for their comfort.

Once a year the old three-master gets underway. This is the annual turn-around cruise which involves pushing her out into the harbor and repositioning her at the pier so that her hull, masts and rigging will weather evenly on both sides.

The four-hour cruise usually occurs during the first week in June. Except for the restoration period, this is the only day that the national monument is closed. However, it is a big day for the crew of *Old Ironsides*, flagship for the Commandant First Naval District, and for the Navy in Boston.

The crew point with pride to the fighting record of their 36-gun frigate. Looking back over her list of victories, it is difficult to believe that she was once thought to be a jinx ship.

ON DECK — Crew member shines brightwork aboard the historic frigate.



ALTHOUGH HER fighting period was not jinxed, her construction days may have been. In 1795, when *Constitution* and her five sister ships were midway in their construction, Congress halted work because they believed the frigates would not be needed. But two years later, when the British and French fleets were harassing our merchant seamen on the high seas, Congress authorized funds to resume construction.

In September 1797 she was ready for launching. A large crowd of dignitaries gathered for the event. But when it came time for the 1576-ton *Constitution* to slide into Boston Harbor as the third member of the country's new Fleet, she would not budge from her ways. Force was applied, but she reluctantly moved only 25 feet before coming to a dead stop. The spectators went home leaving the hardluck frigate still high and dry.

Two days later she gained another 30 feet, and was finally launched on 21 October 1797.

From that day on, *Constitution* and her small company of men grew as a symbol of American courage and patriotic service. Her victories brought dignity to an infant nation and won for its Navy the admiration of the world's great powers. *Old Ironsides* soon taught America that its destiny depended upon victory or defeat on the oceans which washed its shores.

—Lt. Bill Graves, USN



TO SEA — *USS Moctobi* (ATF 105) leaves with *Falls of Clyde* in tow. *Below: Moctobi* moves in for hookup.

Bark's Last Journey

THE FLEET OCEAN tug USS *Moctobi* (ATF 105) has towed one of the last remnants of the sailing age from Seattle to Hawaii. Under her stern was the dismasted 300-foot bark *Falls of Clyde*, destined to become a floating museum in Honolulu.

Falls of Clyde often sailed between the West Coast and Honolulu, carrying as much as 19,000 barrels of oil to the islands in her iron hull and returning with molasses. She was dismasted in 1926 to serve as a floating fuel depot until 1959.

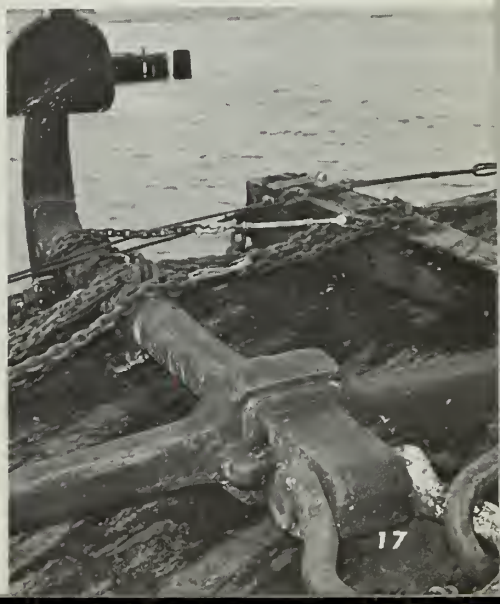
Contributions from Hawaii met the ship's purchase price, saving her from being sunk as a breakwater near Vancouver.

But, though she was reprieved, *Falls of Clyde* was 2700 miles from Hawaii, without engines or sails. After hearing of the problem, the Navy offered the services of a fleet ocean tug. It took *Moctobi* about 20 days to reach Honolulu, where restoration began under the supervision of LCDR Warren Okkersee.



IN HER DAY — *Falls of Clyde* looked like this at turn of century. *Rt:* Her anchor is secured to mossy deck.





A Tour With New Zealand's



WHEN A peripatetic American thinks of New Zealand, he might call to mind the Maoris and beautiful scenery. U. S. Navymen might also call to mind one of the world's younger navies, for New Zealand's had the status of a British Navy detachment before World War II erupted in the Pacific.

United States Navymen at Pearl Harbor had a chance to observe a unit of the young Navy when New Zealand's fast antisubmarine frigate HMNZS *Taranaki* visited there recently.

The 2600-ton New Zealand ship called at Pearl to give her crew seven weeks of refresher training in the techniques of fire-fighting, ABC warfare defense, shipboard repair and maintenance, communications and antiaircraft defense. They were also there to learn the latest in U. S. hunter-killer methods and refueling procedures.

New Zealand Navymen, like most others who serve in British Commonwealth ships, have developed the fine art of being relaxed and businesslike at the same time.

For example, when "Action stations!" sounded on board *Taranaki* one day, the New Zealanders scrambled to meet the onslaught of

MAKING PORT — New Zealand's *Taranaki* ties up at Pearl. *Rt.* Crew check frigate for atomic radiation.



New Navy

"enemy" aircraft. The twin 4.5-inch guns which *Taranaki* carries aft for antiaircraft defense swung into action and other hands made ready to cut loose the ship's *Seacat* guided missile. *Taranaki's* three-barrelled mortars and torpedo tubes were manned to dispatch any submarines which came snooping.

The officers on the bridge plotted the ship's maneuvers and the captain's orders were transmitted loud and clear over the ship's public address system while reports on the ship's position came through sound-powered telephones from the men attending the gyrocompass repeaters. Electronic computers tracked and sighted *Taranaki's* targets.

THE SIMULATED enemy attack occurred a short distance off Waikiki Beach.

The New Zealander's uniforms seem to imply that it is possible to be comfortable yet military. A sailor's winter uniform is similar to that worn by his United States counterpart. In the summer the New Zealand enlisted man is permitted to wear a white T-shirt type blouse and white trousers.

When working weather really gets hot, it isn't unusual to see the New Zealanders in a pair of denim shorts, sandals and no more.



IN TRAINING — New Zealand sailors are briefed by FTG prior to exercise.

The winter uniforms of officers are also like those of the United States Navy. In the summertime, however, officers can wear short white trousers with knee-length socks.

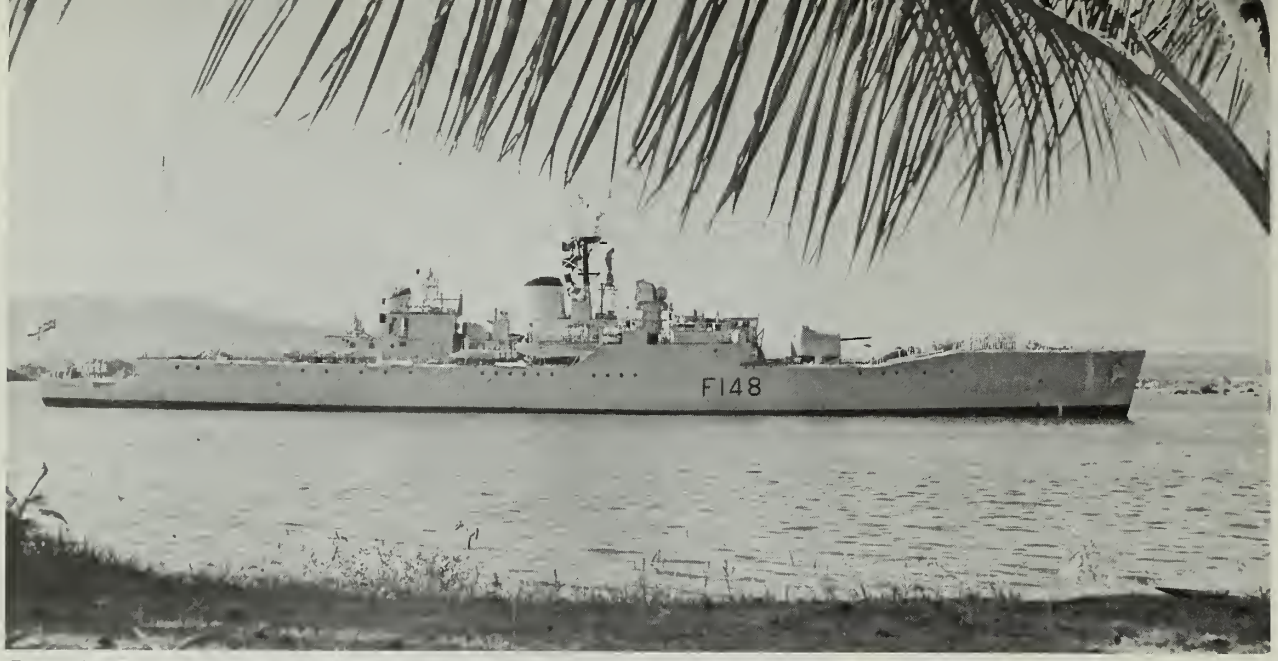
A distinctly dissimilar feature of the New Zealand ship is its grog line, in which each member of the crew can receive an eighth of a pint of rum per day. All hands below chief drink their grog with the benefit of a chaser. Chiefs and above drink theirs "neat." In the evening, each crew member can enjoy a 26-ounce can of the old frosty.

SIMILARITIES between United States ships and New Zealand's *Tara-*

SEA DRILLS — *Taranaki* crew man their stations and *(rt.)* conduct underway communications drill on bridge.







TEAM MATE—Fast ASW frigate *Taranaki*, of New Zealand, enters Pearl for refresher training with Pacific Fleet.

naki were as readily observed by U. S. Navymen as dissimilarities. *Taranaki*, for example, is well equipped to indulge the sports needs of her 243-man complement, having the necessities for hockey, cricket, soccer, softball, fishing and scuba diving.

The officers, chiefs and other enlisted men who serve in *Taranaki* each have their separate dining areas. The enlisted chow hall, being the largest, doubles as a movie theatre for a crew that is as avid for movies as its U. S. counterpart.

Each officer in the ship has his own cabin. Bunks in the enlisted berthing spaces are three high and each is equipped with a reading lamp and an electrical outlet for razors and radios. The entire ship is air-conditioned.

Although *Taranaki's* sick bay is equipped for minor surgery and carries a medical officer, the New Zealand crew seems to be a hardy lot and in need of little more than treatment for minor ailments.

In Pearl Harbor, *Taranaki's* crew members, like numerous American Navymen, invested heavily in hula skirts and aloha shirts; went sightseeing and snapped innumerable pictures of Hawaii's scenery and girls.

NEW ZEALAND'S NAVY isn't big—only 10 commissioned ships and eight in reserve. The list of active ships includes one cruiser, one tanker, four frigates and four fisheries.

A Naval Board composed of the Minister of Defense, who acts as chairman, the Navy Secretary and three Navymen, governs the Navy from Wellington—about 400 miles south of *Taranaki's* home port of Auckland.

Auckland is also the location of New Zealand's principal naval installations and the place at which New Zealand's boots receive their training.

New Zealand's officers are trained at either the Royal Australian Naval College or at the Naval College at Portsmouth, England.

Those who receive their training in Australia are admitted to the college when they are 16 years old. Those who travel to England to be trained in the New Zealand officer's fare of seamanship, navigation, gunnery, naval customs and traditions and naval administration must wait an additional two years.

New Zealand's enlisted men can join up when they are only fifteen and a quarter years old. Enlistments are for a minimum of eight years.

By the time *Taranaki* had steamed out of Pearl Harbor for her return trip to New Zealand, United States Navymen who had worked with her crew in their exercises were well convinced that New Zealand's Navymen make worthy allies who, aside from a few distinctive differences, live very much as do American Navymen.

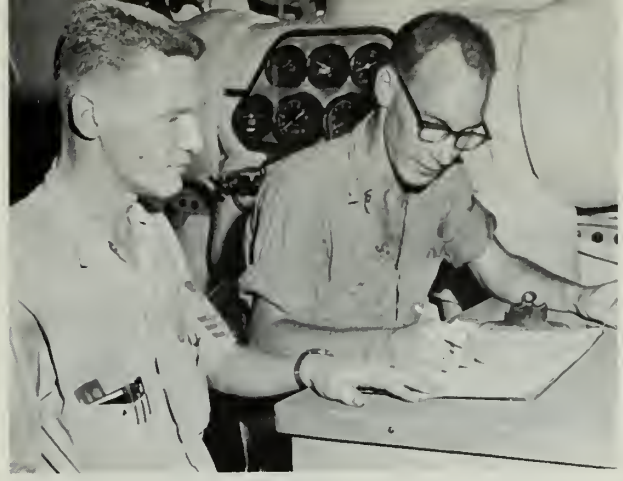
British customs and naval traditions probably always will be strong in New Zealand because of its political ties with England. Many of these traditions have died in the United States Navy in the years following independence. In New Zealand's ships, however, Commonwealth ties still prevail, and everything (well, almost everything) still stops for tea.

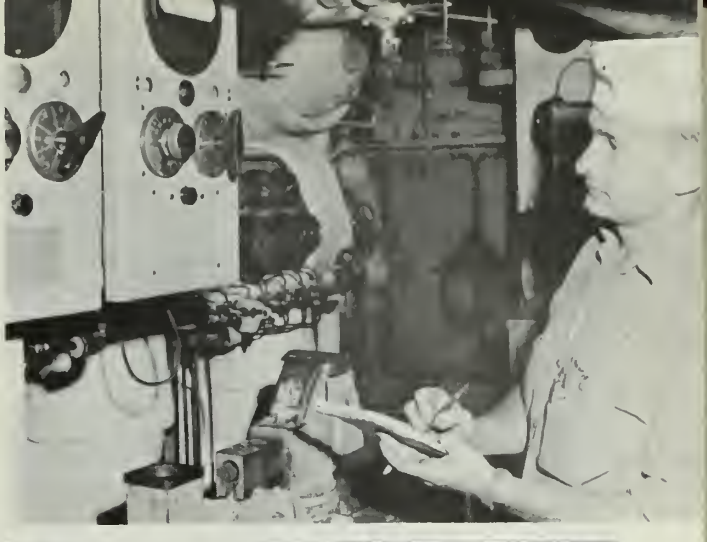
—Arnold M. Herr, JO3, USN.

HERE'S HOW — Drills and classes were conducted for N. Z. Navymen.









They Run a Still

THE EVAPORATOR crew of USS *Oriskany* (CVA 34) produce their ship's weight in fresh water about every 90 days. The 15-man team from B division distills most of the fresh water needed to operate the carrier's boilers, steam catapults, laundries, galleys and scuttlebutts.

During the distillation process the evap gang feeds salt water through a series of heat exchangers and into one of the ship's four evaporators. There, in a partial vacuum, the brine is heated to its boiling point of 195 degrees F. Vapor from the boiling water rises and heats more salt water, until the steam is finally condensed and fed into storage tanks.

Equipment used to purify salt water is monitored and maintained 24 hours a day by three watch teams, each consisting of one petty officer and three strikers. During one 10-week period last year the crew produced over 6,500,000 gallons of fresh water.

Clockwise from Top: (1) K. J. Varney, MM1, and J. N. Patz, MM3, make entry in evap log while at sea on board USS *Oriskany* (CVA 34). (2) R. D. Amrhein, FN, reads salinity cell. (3) Fireman C. E. Lindsey regulates water level in evaporator. (4) Salt water is advanced by D. Trujillo, FN. (5) W. H. Brown, MM3, adjusts pressure at main evaps aboard *Oriskany*.







SERVICESCOPE

Brief news items about other branches of the armed services.

THE AIR FORCE is evaluating a heated gas propulsion system for the Astronaut Maneuvering Unit (AMU), a compact back pack which turns astronauts wearing full pressure suits into one-man space vehicles.

Using an AMU, the astronaut could leave his craft in space and perform various "outside" jobs independent of the mother ship.

The new gas propulsion system for the AMU operates on the relatively simple principle of heating gas to make it expand—then releasing it under precise valve control.

Though other propellants for the AMU have been found, the heated gas propulsion is expected to be safer because of its relatively low temperature and flameless exhaust.

The new gas propulsion, combined with the AMU, results in a back pack that contains its own stabilization, control, propulsion, power, and two-way communications, plus oxygen and other life supporting equipment.

An operating model of the gas propelled AMU is now being tested in a space environment simulator.

Using a full size, experimental version of the AMU, Air Force and civilian test personnel have logged more than 50 minutes of weightless flight on board a specially equipped KC-135 jet transport which flew ballistic trajectories to achieve zero gravity.

★ ★ ★

TWO NEW DEVELOPMENTS in Defense research may have quite an impact on conventional small arms.

The standard Army M-14 may be replaced by a special purpose individual weapon being developed by Army-Industry research teams. The new two-in-one weapon combines a rifle and a grenade launcher.

The weapon weighs no more than today's rifle but has far greater potential.

Gyrojet, another weapon advancement, has been called a wholly new concept in small arms. It is a substitute for a present automatic device and would cost about $3.50 compared with $60 for the one currently in use. It is even possible that this cost may be brought down to one dollar.

The gyrojet projectile costs only eight cents.



ACROSS THE POND—Tanks of 2nd Armored Div. move through German town during NATO air lift exercise.



HOT LINE — Air Force, Army, and Navy together man communications between Moscow and Washington.

TEMPERATURE ABOARD the unmanned lunar craft *Surveyor* will be controlled by paint with heat absorption properties. The space craft, planned by the National Aeronautics and Space Administration (NASA), is scheduled to carry an array of scientific instruments to the moon in 1964.

A comparable paint formula was used to regulate temperature in *Syncom*, the communications satellite launched last February.

Similar paints are being developed for experimental use on the Orbiting Solar Observatory (OSO) and for the *Apollo* project which will one day land a man on the moon.

★ ★ ★

THE AIR FORCE will use 10 million volts of man-made lightning to learn more about the effects of one of nature's most powerful forces.

A portable lightning machine is under construction. It will be used to study the effects of lightning bolts on weapons systems, such as ballistic missiles, and to determine if all components of the weapons systems have complete protection against lightning.

The machine will produce simulated lightning bolts as long as 50 feet. It will be mounted on a truck so it can be transported to missile sites for the studies.

With an output greater than 300,000 amperes (natural lightning can generate up to 500,000 amperes), the machine will be one of the largest portable lightning simulators in the world.

★ ★ ★

ARMYMEN AT INSTALLATIONS throughout the United States will soon be introduced to freeze-dehydrated beefsteak, pork chops, fish patties, beef patties and flaked beefsteaks on their menus, on a trial of the new products.

Freeze-dehydration is a new type of food preservation which involves first the freezing and then the dehydration of the fresh item. Foods preserved in this manner are considered to be significantly more acceptable in flavor, texture and appearance than foods preserved by regular dehydration methods. Packed in cans, the freeze-

dehydrated meats do not require refrigeration and are light in weight.

These advantages are important in the Army where hot meals sometimes must be served under conditions where refrigeration, shipping and storage facilities are limited. When reconstituted, the freeze-dehydrated meats resemble fresh meats in appearance and are grilled like ordinary steaks, chops and patties.

These tests will help determine the adequacy of the preparation directions as well as data on troop acceptability. They will be discontinued after the trial servings are completed.

★ ★ ★

IF IT'S NECESSARY to protect future spacecraft and other space vehicles from meteoroids encountered in space, this protection might be provided by a "dust" wall.

Though most meteoroids are smaller than a grain of sand, larger ones could puncture a capsule or spacecraft cabin, radiator, or fuel tanks. Smaller meteoroids might strike the sides of the spacecraft with such speed that fragments from the inside wall would react as shrapnel. Lesser damage to the vehicle would include pitting and notching of the vehicle surface and erosion of optical and other sensitive surfaces.

The Air Force is working on a theory that a layer of tiny metallic particles (a dust wall), trapped by an electrostatic field and covering the surface of the spacecraft, would protect the vehicle from an encounter with these potentially hazardous meteoroids drifting through space.

Two other concepts of providing meteoroid protection have been investigated by the Air Force, but the dust wall concept appears to be the most promising and practicable, since it would give the greatest protection without significant penalties in weight, power drain or interference with the functions of the vehicle.

A simulated meteoroid gun, capable of propelling particles at speeds greater than 102,000 mph, will be fired into a dust chamber under vacuum conditions to test the protection provided by the dust wall. Methods are also being studied on how to vibrate the dust in order to shatter or vaporize the meteoroids, about 80 per cent of which are porous stone.

★ ★ ★

THE U. S. ARMY has contracted for six test tractors which can be air-dropped or can travel cross-country to almost inaccessible construction sites.

The 14-ton, tracked machine can be used as a bulldozer, grader, scraper, dump truck, cargo carrier or prime mover. It uses a front-loading ballast bowl which can hold enough dirt to double its weight and production capacity and a hydraulic apron which lifts so the tractor operator can dump a load over an embankment or eject it while the tractor is in motion.

The armored earthmover can also carry a squad of combat engineers with their weapons and basic equipment to the scene of battle. This is possible through the use of hydro-pneumatic suspension, which is rigid while the tractor is being used for earthmoving operations, but which is flexible while traveling over rough terrain at speeds up to 30 miles per hour.



THIRSTY TRIO — An Air Force tanker near Hawaii refuels three F8 *Crusaders* of VF-111 from *USS Kitty Hawk.*

Nor is the tractor confined to land operations. It can work in water six feet deep and can float or propel itself across rivers and lakes at speeds up to four miles per hour.

The six machines now being built will undergo engineering and troop tests beginning in the fall of next year. The perfected tractor is expected to be in the hands of troops in 1966.

★ ★ ★

AN ARMY WIND CHILL TABLE which shows the danger of wind and low temperature combinations is being used again this winter to prevent cold injuries to soldiers in the field. A comparison of existing wind and temperature conditions with the table tells unit commanders how warmly their men must dress to avoid frostbite.

Temperatures above freezing may cause cold injuries if accompanied by high winds, the chart shows. A 20-mph wind coupled with 35-degree Fahrenheit temperature has about the same effect upon exposed flesh as would 38 degrees below zero, minus wind.

The Army has been using the table since 1958.



HANDY 'MAN'—Tractor under test by Army acts as dozer, grader, dump truck, prime mover and cargo carrier.

LETTERS TO THE EDITOR

Krishna Was There, Too

SIR: I noticed you omitted mention of USS *Krishna* (ARL 38) in the article, "Amphibious Forces—Antidote for Aggression," which appeared in the September issue of ALL HANDS.

Krishna, a unit of the Amphibious Force, U. S. Atlantic Fleet, makes routine and emergency repairs to landing craft, LCUs, LSTs and other ship types.

To do this, *Krishna* is equipped with shops which can handle anything from changing the mainspring in a watch to changing damaged LST propellers and making hull, electrical and machinery repairs. She carries a crew of 12 officers and 177 enlisted men and is a versatile weapon in the amphibious arsenal.

Your oversight is understandable since *Krishna* is the only ARL assigned to PHIBLANT.—R. H. Lockey, LCDR, USN.

• *September's amphibious article concerned itself principally with a beach assault, which accounts for the fact that* Krishna *was not mentioned. She is, however, a rarity and deserves mention here and now.*

There are only two ARLs in commission at the present time, Krishna *and* Pandemus *(ARL 18).* Pandemus *is assigned to* MINELANT.

As you say, Krishna's *capabilities range from the minuscule to the mammoth. She evolved from an LST (her original designation) and was converted to a landing craft repair ship (ARL) immediately after launching. She reported for duty with the Amphibious Force, U. S. Atlantic Fleet on 1 Feb 1946.*

As an example of Krishna's *capabilities, in the first half of 1963 she worked on the 25 LSTs, 33 LCUs, two APDs, one LSD and one AO which came alongside, as well as taking care of numerous work requests for ships which were not assigned availabilities.*

Her versatility might have been foreseen when she was christened. Krishna *is the name of a reincarnation of the Hindu deity Vishnu, the Preserver, who is usually depicted as having more than two arms.*—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

Splash One Shutter-Snapper

SIR: I am a first class diver trained in Scuba. I have heard of underwater photography in the Navy and am interested in this field of diving. So far, however, I have been unable to find a school which offers training in this field except that given at Underwater Swimmers School at Key West, Fla.

Can you tell me if the Navy maintains a school which offers this training? How about a civilian school? I am willing to ship over if need be. — A. T. N., Jr., MM1, USN.

• *We hate to dampen such enthusiasm, but underwater photography is in the bailiwick of PH men, as is most naval photography elsewhere, over, under and on the surface of the sea.*

The course you mentioned at the Underwater Swimmers School is only open to photographers.—ED.

HALF OF TYPE — The landing craft repair ship USS Krishna (ARL 38), one of only two such ships now in commission, is a unit of PHIBLANT.



Here's A Clue to Many Clews

SIR: I have tried to locate a knot and line book dealing with old time Navy hammock clews. Although I have written to several publishers I have had no luck.

I've owned many hammocks and have never found the equal of the old hammock clew. Can you tell me where I can locate a book having to do with this lost art?—M. C. B.

• *A discussion of hammock clews may be found in the "Ashley Book of Knots," by Clifford W. Ashley (published in 1944 by Doubleday, Doran and Company).*

The "Ashley Book of Knots" lists seven different clews from the simplest to the more complex. Here's what Ashley says about the Navy clew: "Navy clews are made of either six or 12 lengths of nettle stuff; 12 was the older practice. These are middled and the eye is either grafted, ringbolt hitched, or served over. They are then seized together either with or without a thimble. A sword mat is started and, after all 12 ends are worked once or twice, two ends, one at each side, are laid out each time the warps are passed, in the manner of shouldering. Some old seamanship books say that the last pair should be half knotted. But the best practice is to seize them."

Each hammock clew described in the book is also illustrated.

All but one of the clews listed by Ashley are fashioned around a metal ring or eyelet. The one that does not use a metal ring is the pullman hammock clew.

When you finish your clews, you might try constructing a hammock. Ashley describes several—netted, knitted, sailor's hammock, and even one constructed from barrel-staves (if you can find a wooden barrel.)—ED.

This Leave Is A Regular Gasser

SIR: I understand that Navymen home on leave may be granted extra leave, or have their leaves extended, if they help enlist their friends into the Regular Navy. How about the man on leave who does successful recruiting for the Naval Reserve? Is he also granted extra leave? —K. R. J., Sherman, Tex.

• *No. Only those who are instrumental in recruiting applicants for the Regular Navy are granted extensions of leave. And, only men on recruit leave (the 14 days normally granted after boot camp) are eligible. Here's how it works:*

After boot camp a man on recruit

leave may be authorized an additional five days for each individual he recruits. Such a leave extension may not exceed 10 days. In other words, recruiting two men is all it would take to draw the maximum. The extended leave, like recruit leave, is chargeable to annual leave. Therefore, it's actually advance leave that will be charged to annual leave the new Navyman earns later.

The "Navy Recruiting Manual" notes that such a leave extension should not be granted if it would interfere with a school reporting date. If this is the case, and in cases of those who simply don't wish to take the extra five or 10 days, an entry is made in the appropriate service records, extending congratulations for assisting the recruiting service.—ED.



SMOKY MOUNT—Active Japanese volcano Mount Sakurajima is visible off starboard beam of the general stores issue ship *USS Pollux* (AKS 4).

Well, That's Settled—Maybe

SIR: I was interested in the letters of comment concerning the origin of the term "gedunk" (ALL HANDS, September 1963). It appears the only question remaining is which, if any, is correct.

I can't add much to what's already been said, but may be able to help you approximate the time the term became popular.

On 24 Jun 1930 I was on board USS *Chester* (CA 27), one of the first 10,000-tonners of the broken deck variety. She had a built-in ice cream making machine and serving counter, complete with soda fountain, on the main deck in one corner of the mess hall. I believe she was one of the first U. S. Navy ships ever fitted with such equipment.

At first it was considered sissified to think about hanging around a soda fountain, but opening day right after commissioning changed any such ideas, and the saying "See you at the gedunk stand" immediately became popular. This was the first time I'd ever heard the term used.—C. F. A., AEC, USN (Ret.).

• *It's beginning to appear doubtful that we'll be able to prove anything concerning the origin of the term gedunk. Nothing in our mail on the subject is sufficiently documented to serve as proof.*

In the June 1963 Taffrail Talk we first requested information on the term's origin. We recalled at the time that many years ago the characters in a comic strip called Harold Teen made Pop's Candy Store their hangout, and that Pop's soda fountain was called the gedunk. Was this how the term originated, we wondered?

In "Noel's Naval Terms Dictionary" it's "Geedunk" (note the spelling) and is defined as follows: "Candy, ice cream, soda, etc. Any product of the ship's soda fountain. Also called pogey bait."

Some of the readers we heard from had ideas concerning origin of the term that sounded feasible. For example:

• *Mary M. Pulver, SN, USN, a tour guide at NAS Alameda, Calif. Mary explained that she is often asked "what does gedunk mean?" on the numerous occasions Cub Scouts and their leaders visit the base. Mary had been told by an old-timer that during World War II, Navymen serving in the South Pacific carried on with the traditional Navy coffee break. As they sat around dunking their donuts, the natives looked on and eventually incorporated gedunk, or "the dunk," into their vocabulary. The term then spread rapidly, meaning coffee break.*

• *J. D. Tikalsky, JOCM, USN. Chief Tikalsky thinks the term is derived from a Chinese expression which sounds like "gee dung" and means, roughly, a place of idleness. Affixing the term to ice cream was an outgrowth of World War II, when the gedunk stand was the place to buy ice cream. And, as Chief Tikalsky recalls things, the ice cream store in Harold Teen was the Sugar Bowl.*

• *Johnny Wagner, SKC, USN (Ret.): Chief Wagner agrees that the use of gedunk dates back to the Harold Teen era, but thinks it is derived from the German "tunk" (pronounced toonk), which means to dip or sop, either in gravy or coffee. "It was a common practice in the old Navy to do a bit of 'tunking' to soften stale bread. The ge (pronounced gay) is a German unaccented prefix denoting repetition or continuation of the action. In time it went from getunk to gedunk, and that's where the situation now stands."*

And, there were others with still more ideas. However, as we said in September, with Navymen the sailors of the world that they are, a commonly used expression could originate in China, the South Pacific or Germany, as easily as it could in Norfolk. And, going back to what we said in June, in spite of the vast strides in oceanographic research, the sea still retains many mysteries. So do many customs and phrases.—ED.

Repeat Assignments

SIR: Since I have been on duty in Saigon, several questions have been asked concerning repeat tours. Perhaps you could help me answer them.

Can a person be assigned to the same command overseas without a waiting period of three years? If not, is there any waiver? For example, a man arrived in Vietnam in March of 1963 and will be transferred in April 1964. Could he, at the termination of his next tour of sea duty and if he requests it, be transferred back to his old command?—D. G. G., YN2.

• *It is not necessary to wait three years before being reassigned to a duty station overseas. Navymen on Seavey may receive repeat assignments providing no others are requesting the same area for their first time.*

You may receive a repeat tour even though you are not on Seavey. If you desire you may forward a request to EPDOPAC *after you have been on board your sea duty station for at least one year.*—ED.

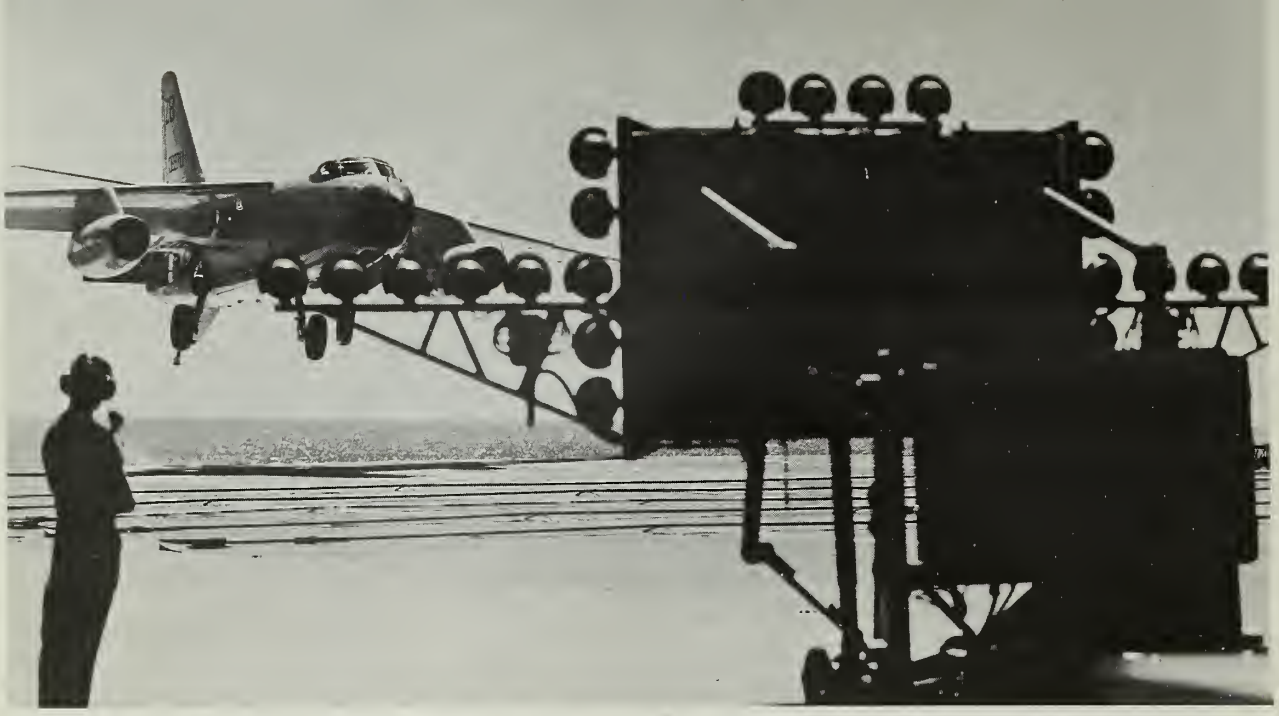
Were They U. S. Ships?

SIR: Recently we came across a 1957 edition of the *Education and Training Manual* (NavPers 10827-A).

May we direct your attention to figure 2-2 on page nine? If those are United States ships, we will eat our collective hats.—J. K. D., PN1, USN and E. J. P., PNSN, USN.

• *We wouldn't press the matter, if we were you. You may have to reach for the mustard and pickle relish.*

The age of the book and of the ships makes positive identification difficult, However, we have established with reasonable certainty that the ships are pre-World War II vessels of the Northampton *and* Portland *classes.*—ED.



REFLECTION—A VAH-4 *Skywarrior* uses mirror landing system in landing on flight deck of *USS Shangri La* (CVA 38).

Zulu Watch

SIR: All respect to our very able destroyer tenders. I've been around destroyers long enough to know that the AD is a big ship that does a good job of service to the Fleet. Only one thing bugs me.

Why doesn't the AD stand its own Zulu watches? If you consider the size of the AD, and the number of men it takes to round out its complement, you'd certainly think it should be capable of standing its own watches.

We on DDs are at sea most of the time and are constantly standing watches. In some cases, we work a four-on, four-off schedule. In port, I and other rated RDs stand quarterdeck and pier watches—in addition to Zulu watches on board the tender.

The watch isn't a difficult one, but it bleeds the DDs of men who could be doing essential work on board their own ships.

The tenders take pride in their ability to handle various situations. So why can't they handle their Zulu watch?—G. A. S., RD3, USN.

• *For the information of readers not familiar with the term "Zulu watch," here's a definition in which some resolution to the above problem may be found:*

"In-port radar defense watch is a twenty-four hour watch. In cases of two or more ships in a nest, the Zulu watch is customarily stood on board one ship only; the others provide watch standers to do a fair share."

It should be noted here that this definition is unofficial. Our new editor-in-charge-of-Zulu-watches couldn't find his specialty defined—or even listed—in various watch stander references. The definition and defense come from people we've talked with who have had Zulu watch experience.—ED.

More Wails for the Whale Boats

SIR: I have read the recent whaleboat racing articles and letters printed in ALL HANDS, and would like to add a word about USS *Amphion* (AR 3). We, too, hope the sport doesn't die.

In February 1963 *Amphion* challenged a Swedish boat team to a race. We had to give our boat a major overhaul before we could compete, but we were ready to go on time.

We lost. But the race generated a lot of enthusiasm.

Our boat crew is ready to try again, but first we need someone to race. If more people would get enthused we could give it another go.—Irwin Lazarus, MLFN, USN.

• *A few months ago we stated that boat racing had become a casualty of World War II, but it's beginning to look as though we spoke a little hastily. There's still a fair amount of whaleboating blood in the Fleet.*

Several races between U. S. Navymen and foreign navy boat crews have come to our attention lately, and they all seem to have sad—but expected—endings, since many of the opposing crews find greater opportunity for practice. Even the pros are not unbeatable, however, as USS Isherwood *(DD 520) boatmen proved some time back. They defeated a British boat crew from* HMS Caprice *by half a length during a one-mile race through jammed Hong Kong harbor. Their win brought the* Isherwood *crew early liberty for the remainder of their WestPac tour.*

The sport seems to be even more of a challenge today than it was in the past. For one thing, there's the procurement problem. The Fleet is well-supplied with whaleboats, but they are all of the gasoline variety. —ED.

Hat or No Hat?

SIR: Several of us were wondering whether the officer who administers an enlistment or reenlistment oath should be covered or uncovered.

We have been unable to find any regulations covering this occasion.—J. J. J., CDR, USNR.

• *The place at which the oath is administered would dictate whether or not the administering officer should wear his hat.*

Paragraph 1110 of "Uniform Regulations" specifies cover when out of doors (except during a religious ceremony or when ordered to uncover) and no cover indoors unless in a duty status, wearing sidearms.—ED.

EOD School? Sure!

SIR: I am an Equipment Operator Second Class (EOH2) and am presently on instructor duty.

I would like to volunteer for duty with an Explosive Ordnance Disposal Team but have failed to locate the instructions which govern eligibility requirements and request procedures. Is my rating eligible, and if not can I receive a waiver?—J. H. A., EOH2, USN.

• *Your rating is not eligible, but at the present time you may receive a waiver. Eligible ratings are MN, AO, EM, BM, GM, TM and EN, but owing to shortage of personnel all Navymen in pay grade E-4 and above will be considered, provided they are not in a critical rating. Furthermore, if you*

have an ARI-MECH combination of 105 or above, are physically fit and request the EOD school, chances are good you'll get your EOD duty.

All instructions concerning application for the Explosive Ordnance Disposal School are contained in the Catalog of U. S. Naval Training Activities and Courses *(NavPers 91679F), Change 1. Quotas for the school are presently filled five months in the future.*

A final top secret clearance is necessary to attend the school, and your request will be handled faster if your command requests the clearance before submitting your application.—ED.

Non-Flying Flying Pancake

SIR: I am amazed that you would omit from your compendium of offbeat aircraft one of the odd-ballest of the lot —the XF5U-1, appropriately nicknamed the *Flying Pancake*. This consisted, almost literally, of a single, oval wing. You never saw anything like it.

A small, baling-wire-and-canvas prototype, the V-173, was built in the early 40's and logged about 130 hours in the air while testing out the principle. A single, military version, the XF5U-1, was built later, but never flew as the Navy decided jets were here to stay and canceled the contract. — Art Schoeni, CDR, USNR.

• *You're right, and thanks for bringing it to our attention. The* Flying Pancake *was definitely a unique bird, and we don't know how we missed it.*

Although she was briefly hailed as, ". . . potentially the fastest propeller-driven aircraft in the world," the military version, XF5U-1, never became airborne and was demolished in 1948 when, as you say, the Navy canceled the contract in favor of jets.

Navy interest began in 1940, and in 1942 a non-military, full-sized prototype made of wood and fabric was launched. We're not too sure of the details, but an article in the British publication "Air Pictorial" (February 1959) gives a fairly complete run-down on the XF5U-1 and the experimental model. According to the article, the prototype (V-173) flew at speeds as great as 150 mph, though its engines were only rated at 80 hp. The Fleet models were to be equipped with two 1350 hp engines.

The V-173 could land at speeds as low as 30 mph, but the angle of attack during low speeds was as great as 30 per cent. Because of this nose-high attitude during landing, the test model was equipped with an extension of the canopy over the nose and underneath the cockpit. This allowed the aviator to look through the deck while landing.

Originally, the pilot was to lie prone so that a protruding cockpit could be avoided altogether, but this scheme was abandoned because, in this position, the pilot's comfort was "marginal," as "Air Pictorial" so discreetly put it.

The two engines of the Flying Pancake *were linked together by a drive shaft. In theory, if one engine failed both propellers could be driven by the remaining power plant. Difficulties in this linkage system presented problems which were partially responsible for discontinuation of the* Flying Pancake *project.*—ED.

Unit Identification Marks

SIR: The Code of Conduct states, in part, "When questioned, should I become a prisoner of war, I am bound to give only name, rank, service number, and date of birth." Yet most Navymen have the name of their unit or command on their uniform. This would serve to divulge information which the Navyman is not bound to give should he be taken prisoner.

What is the purpose of wearing such identification marks?—L. D. P., SK2, USN.

• *Unit identification marks were established to foster* esprit de corps, *morale, unit pride and identity among seagoing units. Article 07611.2 of "Uniform Regulations" provides that in the event of possible emergency which would require security of unit names and locations, wearing of the name marks may be suspended for the duration of the emergency.*—ED.

Ever Been Down to the Chain Locker?

SIR: I recently detached from an AKA in PHIBLANT, where I served as the commanding officer's yeoman. During my entire time on board—even making weekly material inspections—I never sighted a chain locker.

Would you tell me where the chain locker on an AKA is usually located, how it may be reached, and how many chain lockers there are?

Approximately how many links make up each anchor chain on an AKA? How much does each link weigh? Is the chain locker literally full of chain when both anchors are secured in the hawsepipe?

What are the interior dimensions of an AKA's chain locker? Is the locker a rectangular steel compartment as pictured in the illustration on page 215 of the *Bluejacket's Manual*, or does it have a troughed deck?—R. L. M., YNC, USN.

• *The chain locker on an AKA (94 class) is usually located forward beneath the second deck centerline and may be entered via a manhole on the second deck. There is only one chain locker, but it is divided into two compartments by a bulkhead. Each compartment measures about seven feet long, four feet wide and 23 feet deep.*

An AKA with two 11,000-pound stockless anchors carries about 180 fathoms (1416 links) of die-lock chain on the port side and 120 fathoms (942



ODD PAIR—In early 40's this V-173 logged about 130 flight hours. (Rt.) The XF5U-1 *Flying Pancake* never flew.



UNDERWAY REFUELING EXERCISES involve, at one time or another, almost every ship in the Navy. Here, the radar picket destroyer USS Southerland *(DDR 743), after having topped off her tanks, pulls away from the oiler* USS Ashtabula *(AO 51) during operations off the coast of Japan. In the background are the attack aircraft carrier USS Coral* Sea *(CVA 43) and other units of the task force.*

links) on the starboard. The links are two and one-eighth inches in diameter and weigh 33 pounds each. The complete portside chain weighs 47,220 pounds and the starboard 31,480 pounds.

The chain never fills the chain locker, as there must be room for access on top of the chain.

The chain locker may or may not be rectangular in shape, depending upon the ship's beam. If the ship has a fine bow, the flare may show up in the outboard boundaries. The deck is usually flat and perforated so that sand, mud and water carried up by the chain may drain into a lower compartment, which is cleaned periodically.—ED.

Why Do Stars Point Down?

SIR: Some of the men on board my ship, USS *Cubera* (SS 347), have raised a question we hope you can answer. It concerns the accepted positioning of stars on Navy uniforms. Why does one ray always point down? As they appear on officer coat sleeves, and senior and master chief petty officer sleeves and collars, and on ribbons, for that matter, the stars appear to be upside down.—C. F. M., YNSN, USN.

• *Our editor-in-charge-of-stars couldn't come up with the reason they point down. Official records do not so indicate. We do know that the officer sleeve star, authorized many years ago, is traditionally worn with one ray down. It is for this reason, possibly, that no change has thus far been made over the years in the positioning of star insignia.*—ED.

About Aircrew Insignia

SIR: Some questions concerning the aircrewman wings worn by certain enlisted airdales: Are the wings a permanent award? Once awarded, may they be worn throughout a man's career, even though he may not be in a flying status? Are they lost upon transfer from the squadron in which awarded? Exactly who may wear this award, and for how long?—M. P. S., AG2, USN.

• *First of all, it's aircrew insignia, not award, even though there may be some similarity in definitions. Award is an all-inclusive term for decorations, medals and ribbons. An insignia—similar by definition to a badge—is a distinctive device worn as a sign of special qualifications.*

The aircrew insignia, a winged (wingspan is two and three-quarter inches) gold metal pin with the block letters "AC" superimposed upon a center design (anchor), is called a "breast insignia."

Only qualified aircrewmen may wear the aircrew breast insignia. It shows that you're serving as a regular member of an aircraft flight crew. It may not be worn when you are not assigned such duties, or when you become disqualified after having once been eligible.

The "BuPers Manual" (Art. C-7340) notes that a qualified aircrewman is a petty officer of any rating who meets the following: Has had at least two years' naval service; volunteers for aircrew duty; meets annual psychological and physical requirements; and successfully completes appropriate courses of instruction and meets operational standards.

Disqualification for aircrew duties may occur whenever a medical examination determines you are no longer physically or psychologically qualified. Also, the aircrewman may be disqualified after a technical examination uncovers a lack of operational qualifications, when he withdraws as a volunteer from aircrew duties to which assigned, or when he's detached from duty involving flying for more than four years.

Once disqualified, an aircrewman may not be eligible for requalification during the same enlistment, except for those who requalify after physical or psychological disqualification.

Note that a physical disqualification does not revoke the aircrewman's right to wear the distinguishing sleeve mark. Other disqualification factors do revoke this right.

If you want more details on the who and how long of aircrew insignia, ask your personnel officer to show you article C-7403 of the "BuPers Manual," and article 0656 of "Uniform Regulations."—ED.

Aircrew Breast Insignia

SIR: Is it mandatory for a CPO who is a qualified aircrewman serving as a flight crew member to wear the aircrew breast insignia on his tropical khaki shirt? Would the same rule apply to an officer with regard to his pilot's wings?

We are aware of the provisions of the *Uniform Regs* but would like to have your interpretation.—R. E. C., Jr., AMSC, USN.

• *We assume you have already consulted Articles 0157.1.a.(1) and 0656.1.d of the "Uniform Regulations" which state: "Pin-on devices may be worn on the khaki shirt when the coat is not worn and on the blue flannel shirt and tropical shirts."*

The regulations say in some situations certain insignia shall *be worn. In the portion of the regulation which we quoted the word* may *is used. This indicates to us that wearing the air insignia on the khaki shirt when the coat is not worn is optional for both you and the officer.*—ED.

Seavey Orders

SIR: On page 45 of your November issue—in an item about Seavey Segment 1-64—you said Navymen in that segment "can expect the first transfer directives to roll out of the Bureau of Naval Personnel next June."

According to BuPers Notice 1306 of 11 Sep 1963, the first transfer directives will be issued in February 1964. Which is correct?

Incidentally, while we're on the subject, why the four-month time lag?—E. T. K., BM3, USN.

• *The BuPers Notice is correct. The article was intended to point out that*

the personnel in this Seavey segment would begin to move, in accordance with their orders, in June 1964. Actually, we should have stated that the first transfer directives will be issued in February 1964, directing the transfer of personnel beginning in June.

The four-month time lag, as you put it, is perhaps better described as a reasonable period for planning—at both ends.

It gives your EPDO (Enlisted Personnel Distribution Office) or BuPers detailer enough time to check out the possibility of placing you in the billet you've requested. Also, you are notified in February that you have been made available to the EPDO or BuPers detailer for transfer in June.

In this way, you know four months ahead of time that you will be transferred during a specific month, and will have plenty of time to make preparations for the move.—ED.

What About Rating Structure?

SIR: A chart way back in your July 1960 issue shows the various ratings and the letters used in their identification. They are divided into 12 groups, and the more I look at them the less sense they seem to make.

For example, Group III is named electronics, yet it does not include the RD, SO and RM ratings. For that matter, why is RM in Group V—is it a clerk's rating?

Why aren't SK, JO, CS, and SH in Group VI, miscellaneous?—E. A. L.

• *We'd like to answer your questions directly, but our yeoman in charge of tough questions is stumped. As a matter of fact, you missed a few—TD, PH and PT are included in the aviation group, though they normally do not wear wings. Dental Technician could easily be considered part of the medical group, yet it's listed separately.*

You're not the first to spot these inconsistencies. The entire enlisted rating structure is currently under study by the Permanent Board for Review of the Enlisted Rating Structure. Among the points being considered are the items you mentioned.

It is often difficult to discover why a rating was assigned to a particular group. The ratings were grouped partially on the basis of shipboard organization and partially as a result of the control over certain ratings by technical bureaus and offices. For example, the Bureau of Yards and Docks has exclusive distribution control over the CB ratings.

Another reason for apparent inconsistencies may be the age of the present rating structure, in effect since 1948. Since that time the actual jobs of many ratings have changed drastically. Torpedoman's Mate is listed under Group II, Ordnance, but is becoming more and more involved with electronics. Also, actual jobs may differ from what the name of the rating infers. A Radioman may be called on to do a large amount of clerical work, as may a Commissaryman. Ship's Servicemen are required to keep extensive records, especially those who are associated with the ship's stores.

At best, these are only partial answers, and although it is difficult to set any standard rules for organizing the ratings into groups because of the many variables involved, the Rating Structure Review Board hopes to recommend a more logical and workable structure in the near future.—ED.

Are PNs Critical?

SIR: In November's Letters to the Editor column you answered a letter about ratings not being ordered to recruiting duty. Then you listed the ratings not presently being ordered to recruiting duty: RD, SO, QM, FT, GMM, ET, AT, ADJ, AE, PN, AQ and RM.

Am I to understand that PN is now defined as a critical rating? And if PNs are not being ordered to recruiting duty, does this mean that only YNs will be ordered to recruiting duty to perform administrative and personnel duties?—R. M. S., PN2, USN.

• *No, PN is not a critical rating. It was included on the list not because it was critical throughout the Navy but because, in 1963, all Personnelmen being ordered to shore duty were needed to fill regular shore duty billets.*

Critical ratings are not ordered to recruiting duty either, but for a different reason. Because critical ratings are undermanned, all Navymen in that category are ordered to duty in billets where their special skills will be of the greatest use to the Navy.

When the PN situation on Seavey-Shorvey changes, and there are more PNs due for shore duty than are billets available, they will again be ordered to recruiting duty. Until that time, the PN recruiting billets will be filled with YNs.

It is still too early to tell if the Seavey-Shorvey balance will change this year in favor of the PN recruiters. If you want recruiting duty you should submit your request when you become eligible for transfer ashore. If it becomes necessary to curtail the assignments again in 1964, you will be notified so that you may forward duty preference changes to reflect your general shore duty choices.

Incidentally, this could happen to any rating.—ED.

A Crow Makes All Styles Right

SIR: What is the current regulation regarding 'pressing' or 'rolling' the coat sleeves of CPO uniforms? I asked my cleaner why the sleeves are pressed half the time and rolled the other half and he said it was because he was uncertain which is correct. I figure he must have been right at least 50 per cent of the time, but when?—J. A. M., HMCM, USN.

• *He was never wrong. There are no Navy regulations concerning whether CPOs' and officers' coat sleeves shall be 'pressed' or 'rolled.' A check with a drycleaner's association indicates that 'pressed' or 'rolled' coat sleeves are more or less a matter of style.*

At the present time the majority of people prefer that their coat sleeves be rolled, whereas sometime ago the fashion seemed to be for the pressed sleeve. The association also indicated that if a garment is received for drycleaning with pressed sleeves, it is normally finished in the same manner, unless otherwise specified by the customer, and vice versa.—ED.

A FREQUENT PUMPER—In a period of one year with U. S. Sixth Fleet, the oiler *USS Mississinewa* (AO 144) replenished a total of 600 ships.



Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• *Battleship Association* — All who ever served in a battleship and who are interested in holding a reunion in San Diego, Calif., next summer may write to David C. Graham, American Battleship Assn., P. O. Box 11199, San Diego 23, Calif.

• USS *Mississinewa* (AO 59)—All who served on board who are interested in holding a reunion, with time and place to be designated by mutual consent, may write to W. A. Glenn, 28825 Eddy Rd., Wickliffe, Ohio.

• USS *Sargent Bay* (CVE 83) — Members of the ship's company and attached air groups during World War II who are interested in holding a reunion during the fall of 1964 may write to Vernon Kastner, 146 Kansas St., Rochester, N. Y.

• USS *Shubrick* (DD 639) — All who served on board while the destroyer was in commission who wish to hold a reunion in the late summer may write to Robert Johns, 214 Houston St., Chester, Pa.

• *MAG 25, 'SCAT,' VMJ 253, Hdqtrs Sqdn, Service Sqdn*—Original members, Marines and Navy, of these units who are interested in holding a reunion in Anaheim, Calif., in the summer are invited to write to Col. W. K. Snyder, USMCR, P. O. Box 535, Tustin, Calif.

• USS *Arizona* (BB 39)—All former officers and men who served on board between construction and Pearl Harbor Day are invited to attend a reunion on 25 Apr 1964 at the Lafayette Hotel, Long Beach, Calif. For details, write to Joe Keehan, 811 Locust Ave., Long Beach 13, Calif.

• USS *Columbus* (CA 74)—All who served on board during the 1950-51 Mediterranean cruise and who are interested in holding a reunion, with time and place to be decided, may write to William E. Polcsa, 15 Winona Way, North Weymouth, Mass.

• USS *Nashville* (CL 43)—All who served on board during World War II who are interested in holding a reunion may write to Ralph C. Lynn, 2116 W. C St., Anniston, Ala.

• USS *LSMR 512*—All who served on board from January 1950 to December 1953 who are interested in holding a reunion may write to A. J. Sturks, 181 Early St., Providence, R.I.

About That Uniform Change —

SIR: During the last few months much has been said concerning a new type of uniform for second and first class POs.

As an E-5, I would like to wear the Ike jacket (similar to the Air Force type), trousers in black whipcord, overseas cap, white shirt, black tie, and black shoes. The rating badge could be either red or gold, as it is today.

This uniform could be strictly optional, paid for by the Navyman, in the same manner that USMC personnel purchase their own dress blue uniform. —T. D., HM2, USN.

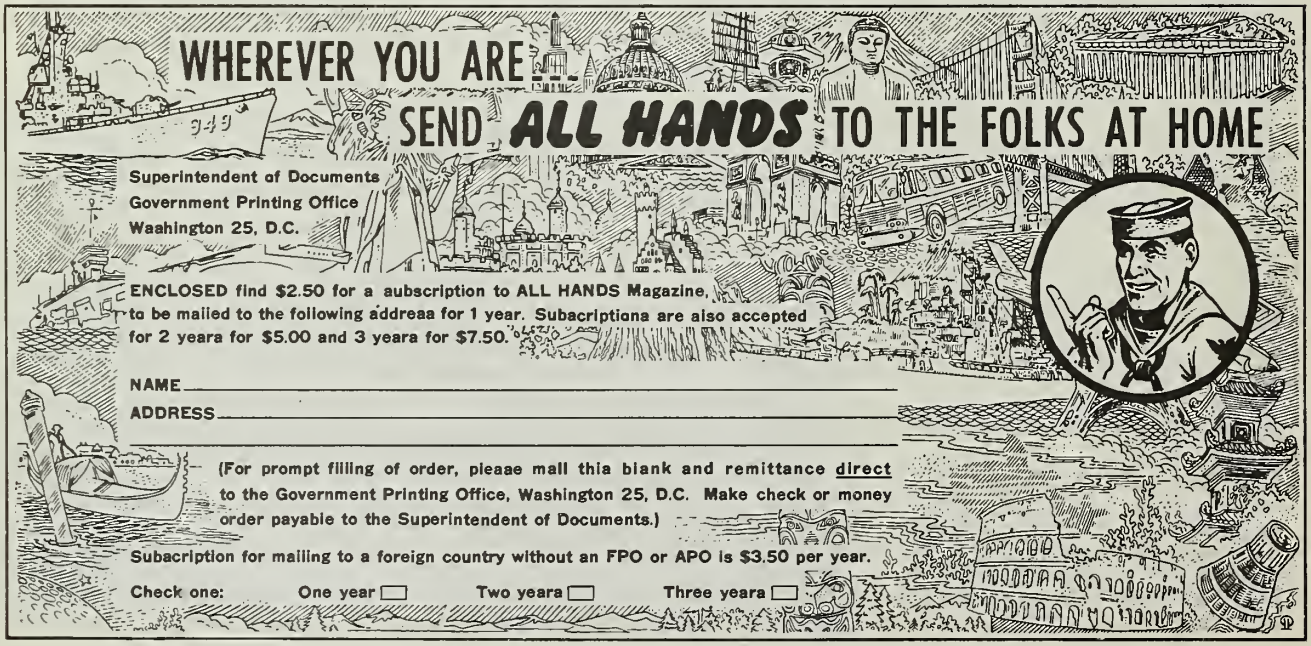
• *The current interest in uniform changes is undoubtedly the result of the pilot program, scheduled to begin upon completion of outfitting in early spring. This should provide the Permanent Naval Uniform Board with information upon which to base a recommendation to the Secretary of the Navy as to whether or not the chief and officer uniforms may be worn by lower rates. The test will last one year and will mean a uniform change (at least temporarily) for about 1000 first and second class POs.*

Your suggestion is not new. A similar uniform was tested about 1947, but the results were negative. Among other things, the Ike jacket proved hard to fit and required expensive individual tailoring. During the same period several other uniforms were tested. One of these consisted of a button jacket which resembled the present-day jumper, a white officer's shirt, and a black four-in-hand tie. The Fleet didn't care much for it.

The uniform presently under consideration is the basic design used in chief and officer uniforms. The Uniform Board hopes that the planned one-year trial will provide a positive and accurate evaluation of the desirability and feasibility of making a uniform change.

Your suggestion has been noted by the Uniform Board, and will go on file in the Bureau of Naval Personnel. Since morale is the major factor when considering a new style, a uniform change is a matter of majority rules as well as practicality. Therefore a strong expression of opinion by personnel in the Fleet is of major importance in bringing about any change.

Thanks for your suggestions.—ED.



Assignment After Deep Freeze

SIR: I have a question concerning assignments after a tour with Operation Deep Freeze. BuPers Notice 1300 (dated 24 Jul 1963) was used to solicit volunteers. You discussed this in the October 1963 ALL HANDS.

One reward offered to Navymen who complete Antarctic tours is as follows: "Every effort is made to assign personnel to one of their choices of duty if, when submitting duty preferences, those preferences are in consonance with their rank or rating."

My question is this: What percentage of those who volunteered will actually receive duty of choice?—T. W. S., YN2.

• *It is estimated that 90 per cent will receive duty of choice. The remaining 10 per cent will be assigned to shore duty, to "billets in consonance . . ."*

Not so bad, yes? Only one out of 10 will go to duty other than that requested. However, that duty will be shore duty—but not by accident. The Navy feels that after you've spent a tour on the ice you are entitled to duty ashore. Rejoining your family is not the least of the reasons behind this policy.

The deadline for applying for the 1964-65 tour was 1 Nov 1963.—ED.

Mauna Kea Wants Record

SIR: During her most recent western Pacific cruise, the ammunition ship USS *Mauna Kea* (AE22) established two records for underway rearming.

The first was a new record for AE-to-CVA/CVS with an average transfer rate of 113.6 short tons per hour.

The second was AE-to-DD with an average transfer rate of 29.8 short tons per hour.

These two marks surpassed the old standards of 68.3 short tons to CVA/CVS and 20.8 short tons to DD.—T. E. McCormick, Jr., CO, USS *Mauna Kea* (AE 22).

• *The "old standards" given in your letter appear to be records for underway replenishment ships in WESTPAC under operational command of the Seventh Fleet. No figures were available to us for the First, Second or Sixth Fleets.*

Far be it from ALL HANDS *to say anything is the firstest or the mostest but at any rate, your transfer rate deserves congratulations.*

You notice we're not repeating the old cliche about getting a bang out of your work.—ED.

National Defense Service Medal

SIR: What are the eligibility requirements for wearing the National Defense Service Ribbon? I entered the U. S. Naval Academy in July 1952, and graduated in 1956. Am I entitled to wear this ribbon?—E. L. G., LT, USN.

• *All persons who served on active duty in the armed services at any time between 27 Jun 1950 and 27 Jul 1954 are eligible to wear the National Defense Service Ribbon, with the following exceptions: Reserve personnel on active duty for training; Reserve personnel on short tours of active duty to serve on boards, courts, commissions, etc.; and any persons ordered to active duty who, on physical examination incident thereto, were disqualified and immediately released from active duty.*

Midshipmen at the Naval Academy are on active duty in the same degree as enlisted men or commissioned officers detailed to the Academy for the performance of duty. You are, therefore, entitled to wear this ribbon.—ED.

Reasoning in E-8/E-9 Exams

SIR: In July 1963 I took the examination for EMCS and was surprised to discover that a large percentage of the test questions did not pertain to subjects covered by the study material listed in the *Training Publications for Advancement in Rating* (NavPers 10052-K).

I am specifically referring to questions on physics, word matching and algebra. This misunderstanding may have cost me a considerable amount of money, and it seems an unfair surprise for the CPO who is taking the test for the first time.—J. R. S., EMC, USN.

• *The manuals listed in "Training Publications for Advancement in Rating" contain answers for only two of the three subjects covered by the examination.*

The two subjects covered by the publication are supervisory and professional knowledge. The third category, not covered by the listed manuals, is common knowledge, sometimes referred to as reasoning ability.

Questions dealing with common knowledge on senior or master chief examinations will usually be of a mathematical, mechanical or verbal nature, and will not necessarily pertain to your specific rating.

The Summer-Fall 1962 issue of the "Naval Training Bulletin" suggests that prospective senior and master chiefs study the following publications:

- *College Entrance Examination Study Material (limited distribution).*
- *High School Subjects Self-Taught (Navy-wide distribution).*
- *Basic Mathematics (Navy-wide distribution).*
- *Specialty Handbooks (limited distribution).*
- *Mathematics Review Books (Navy-wide distribution).*
- *Popular Psychology Books (Navy-wide distribution).*
- *Applicable USAFI books (Navy-wide distribution).*
- *Vocabulary Development Books (limited distribution).*

This is only a partial listing of books which may improve your reasoning ability. (The order of listing does not indicate comparative value.)—ED.

QUIZ AWEIGH

Many sailors pride themselves on their knowledge of salty words and phrases. How salty are you?

1. A spider is a web-spinning arachnid. It's also a:

(a) Magnifying glass on a compass.



(b) Knot used for loading cargo from a pier.

(c) Jellyfish.

2. A jack-of-the-dust is a:

(a) Compartment cleaner.

(b) Commissaryman in charge of a provision issue room.

(c) Vacuum cleaner.

3. A monkey drill is a:

(a) Small drill used by dental technicians.

(b) Physical drill.

(c) Drill team composed of recruits.

4. An iron kelly is:

(a) An armed forces chess trophy.

(b) An instrument similar to a marlinspike.

(c) A steel helmet worn during drills and exercises.

5. An informal group before which a Navyman might rehearse a presentation is called a:

(a) Review group.

(b) Murder board.

(c) Listening post.



6. A boat box is a:

(a) Box used for shipping small boats.

(b) First aid kit for use in a boat.

(c) Container for boat equipment and accessories.

Answers to Quiz Aweigh may be found on page 53.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



LIFESAVER—Bruce E. Thon, DT3, USN, of Fleet Activities Yokosuka, Japan, gets Navy Commendation Award for rescue of shipmate from sea.

Jackson Fires *Polaris A-3*

The newest member in the growing family of *Polaris* missiles has progressed from flat pad testing on the ground to successful launching from a submerged submarine.

The *Polaris A-3*, with a range of 2500 nautical miles, was launched down the Atlantic missile test zone from USS *Andrew Jackson* (SSBN 619) while the sub was cruising submerged off Cape Kennedy.

Both the launching and test flight were termed successful, and it is now believed the *A-3* will be operationally ready for use aboard fleet ballistic missile subs (such as *Andrew Jackson*) sometime this year.

Though the launching from *Andrew Jackson* was a first for the *A-3*, flight testing had been underway since August 1962 from pads at Cape Kennedy, and from the surface test ship USS *Observation Island* (EAG 154).

The third generation *Polaris* more than doubles the range of the *A-1* (1200 nautical miles), and can go 1000 miles further than the currently operational *A-2*.

BUILDERS OF THE NAVY



In 1794 Joshua Humphreys was appointed by President Washington to design six frigates to combat the Barbary pirates. Humphreys believed American ships should be stronger, faster and more durable than anything the European powers could produce. In keeping with his beliefs, his ships had heavier batteries, thicker timbers, finer lines and stronger, stauter spars than ships produced in Europe. His designs were copied by the British Navy and two of his ships, CONSTITUTION and CONSTELLATION, played particularly prominent roles in early U. S. history.

Owens Visits Middle East

The destroyer USS *Robert A. Owens (DD 827)* recently took a side trip from Sixth Fleet activities in the Mediterranean and spent five weeks on a goodwill mission to the Middle East.

During this period the crew took advantage of numerous opportunities to further friendly relations between the United States and middle eastern countries through official calls, acts of assistance, distribution of textbooks, food and other materials. Highlighting *Owens'* Middle East stint were visits to Assab, Ethiopia; Colombo, Ceylon; and Aden.

Owens' first stop was Assab, a port not often visited by U. S. Navy ships. The CO, CDR E. A. Parke, USN, accompanied by the Governor of the Assab Division of Ethiopia, called on the local high school and presented a quantity of English language textbooks. Later the Governor and local officials toured *Owens*.

Next stop was Aden. This is the site of several large British military installations, as well as a regular port of call for ships of Her Majesty's Royal Navy. *Owens'* crew were entertained by the British during this visit, and exchanged calls with the crews of HMS *Eskimo* and *Salisbury*.

After further operations, a second visit was made to Aden. This time *Owens* presented 500 English language textbooks to an elementary and a high school, which are attended by Arab, British, Somali and Indian pupils. Baby food and cleaning equipment were presented to a charity clinic.

One evening a buffet dinner on board *Owens* was attended by 25 guests, including several Arab members of the Aden government, British advisors to the local government, members of the American Consulate in Aden, and officers of USS *Cone (DD 866)*, which was also in port at the time. This event marked the first time a visiting U. S. Navy ship had entertained officials of the newly established local Arab government of the State of Aden.

Perhaps the high point of *Owens'*

deployment was the visit to Colombo, Ceylon. *Owens'* crew were warmly received. Baby food, cough medicine, toothpaste and shampoo were donated to a Buddhist orphanage and the National Council for Child and Youth Welfare, a Buddhist organization which operates homes for malnutrition cases, mentally retarded children, tuberculosis cases and orphans. Sets of encyclopedias were presented to two Buddhist universities.

Fifteen sailors volunteered to work for two days at another Buddhist orphanage. They painted a large dormitory room, refinished furniture, repaired a water cooler and generally sought to refurbish the building and grounds. As a parting gift they presented the home with a playground swing set.

On other occasions, 45 children from two other orphanages were entertained on board *Owens*. After guided tours of the ship, the children were served refreshments and shown movies.

Owens teams played two basketball games and one softball game against local teams.

Tours of the ship were conducted daily, with about 1000 persons responding.

Owens was commended in a message from COMIDEASTFOR for her activities in the Middle East. The message read, "Upon your departure from the Middle East I desire to commend your efforts in supporting the Navy's mission in this area, and particularly the well planned and executed visit to Colombo, Ceylon. Your Handclasp program and civic assistance efforts by your crew also are noteworthy. Well done and smooth sailing."

Smile! You May Be On TV

The long eye of television has increased the viewing power of air controlmen at the Naval Air Test Facility, Lakehurst, N. J. A closed circuit TV camera has been installed 2000 feet from the end of a newly extended runway — an area which, owing to the roll of the Lakehurst terrain, is out of eye shot in the control tower.

Two 16-inch monitors (viewing screens) located in the tower permit controlmen and engineers to watch certain phases of landing operations they couldn't see before. And, a slow, sweeping check of the entire runway for obstructions can be made before communicating with pilots for landing clearance.

The camera is controlled in the tower. By flicking switches, air control operators can see any point on the runway. If he wishes, the air controlman can zoom in for close-ups of an aircraft as it passes by the camera after touchdown.

The camera itself is mounted on a 20-foot tower, 10,000 feet down the 12,000-foot landing strip. The control tower is 5000 feet from the camera and blind runway area.



AWARD GRABBER—Helicopter Antisubmarine Squadron Three made clean sweep of 1963 helo awards while operating from *USS Intrepid* (CVS 11).

Two More Ships Commissioned

Nathan Hale (SSBN 623) and the guided missile frigate, USS *Dale* (DLG 19) were commissioned recently. *Nathan Hale* was the fourteenth fleet ballistic missile submarine to be commissioned.

USS *Dale* was named for Commodore Richard Dale who was first lieutenant of the *Bon Homme Richard* under John Paul Jones when *Serapis* was captured in 1779.

Nathan Hale, of course, was named for the American patriot who was hanged by the British during the Revolutionary War.

At the time *Nathan Hale* was commissioned, 10 of the 14 commissioned FBM submarines were deployed. Eleven others had been launched but not yet commissioned. Sixteen others were either under construction or authorized.

HelasRon Three Hits Jackpot

Helicopter Antisubmarine Squadron Three has made a clean sweep of the 1963 helo awards. The squadron won the Battle Readiness Excellence Award, the Chief of Naval Operations Flight Safety Award and the Arnold Jay Isbell trophy for safety.

The squadron logged almost 7000 accident-free flight hours during the year and made 2000 day shipboard landings and 500 night carrier landings. They have safely flown over 18,000 hours since November 1960.

Helasron Three, flying the new SH-3A jet-powered helos, also helped their air group (Carrier Antisubmarine Air Group 56) win the Rhode Island Navy League "Red Rooster" award. The squadron operates aboard USS *Intrepid* (CVS 11), winner of the 1963 "A" award for ASW excellence.

New Correspondence Courses

A correspondence course for advancement to Postal Clerk 3 and 2 has been released by the Bureau of Naval Personnel. The course is the first of its kind.

At the same time *Mineman* 3 (NavPers 91334-1A) and *Mineman* 2 (NavPers 91335-1) were superseded by *Mineman 3 and* 2 (NavPers 91335-2).

ECC Postal Clerk 3 and 2 (NavPers 91401-3) consists of five assignments and is unclassified. *ECC Mineman 3 and 2* is made up of six assignments and is confidential.

Optical Man Makes Sweet Music

Naval installations throughout the world are usually well able to supply their people with equipment necessary to indulge their sports and hobbies. However, even the biggest and best shops would be hard put to supply Robert L. Mattingly, OM2, with the gear required for his creation of first-rate classical and flamenco guitars.

In 1958, Mattingly, a five-year Navyman, picked up an inexpensive classical guitar in Japan and taught himself how to play. By 1960, his skill as a musician had so outgrown his instrument's capabilities that he began shopping around for a quality guitar. They cost too much, so he tried his hand at making his own.

He gathered together what scant reading material was available on the subject, borrowed a quality instrument to use as a guide and went to work. Since he began producing guitars, they have been snatched up by amateur and professional guitarists alike and Mattingly has found himself in the enviable position of having the demand for his instruments exceed the supply.

In the construction of his guitars, Mattingly uses only the finest quality woods which he imports from Spain, Germany, India, Yugoslavia and South America. His sounding boards are made of silver spruce, his fingerboards are of ebony from the Congo.

The frets on a Mattingly fingerboard are of German silver which he painstakingly inlays into the ebony and the guitar's sound holes are each inlaid with about 4000 1/32-inch squares of wood which are set in place with the aid of tweezers.

After the woods of his guitars are shaped and glued together in the proper places, Mattingly applies five coats of hand rubbed varnish and one coat of French polish before he is ready to string the guitar and tune it.

When Mattingly isn't working at being a Navyman or making guitars, he performs in coffee houses, at parties, on the radio, and gives guitar lessons. Mattingly likes his avocation so well he intends to produce guitars as a full-time career when he retires from the Navy.

By that time, he hopes, his skill will be so highly developed that even the masters of the guitar will be playing a Mattingly instrument.

—Joe Tom Davis, SN, USN.

Hancock Liberty, New Style

The Navymen on board uss *Hancock* (CVA 19), like all other sailors in the world, knew Hong Kong was a good liberty port. They also knew that, along with the floating restaurants and fabulous bargains, there were acres and acres of human flotsam—the backwash of Communist oppression on the mainland.

Many in Hong Kong work to alleviate the misery of these refugees, most of whom arrive in the British Crown Colony dead broke. Among the workers are the Maryknoll missionaries who establish resettlement areas. Another is Dr. Jim Turpin, whose *Project Concern* helps give medical aid to the 200,000 "boat people" in Hong Kong who spend their entire lives on the water.

The people in the Maryknoll resettlement areas are supplied with food made from U. S. surplus flour, powdered milk and cornmeal.

These American groceries are converted into Chinese noodles by refugees in factories built by the Maryknoll missionaries. The only shortcoming in the plan was that many more noodle factories were needed to feed the continuing flow of refugees.

The difficulty for Dr. Jim Turpin was not necessarily the 300 patients who visited his floating clinic each day, but those who were unable to reach the clinic because they lacked transportation.

In short, the problem—reduced to manageable proportions — was another noodle factory for the Maryknoll fathers and a 36-foot water ambulance for Dr. Turpin. The men on board *Hancock* thought about $5000 would do the trick.

Even for a ship like *Hancock*, $5000 represented a big bite out of each man's liberty funds. Her dental division, for example, contributed over $14 per man, while her photographers donated more than nine dollars each. Other divisions in the ship were also generous.

All the contributions made by *Hancock's* crew added up to food for many who would otherwise have gone hungry and medical aid for those who would have suffered.





MUSIC MAN—R. L. Mattingly, OM2, USN, decorates guitar he's building. *(Rt.)* Mattingly plays one of his creations.

Tandem Sub

A highly maneuverable model submarine which does not use diving planes, rudders or standard screws is undergoing feasibility tests by the Navy. Control and power for the 18-foot model are furnished by two rotating, blade-studded bands which encircle the hull near the bow and stern.

The design could conceivably make conventional, screw-driven submarines obsolete. However, even if accepted by the Navy, the first operational tandem propeller craft would not appear for a number of years.

If the concept proves feasible a larger prototype will probably be built. Then, in several years, small research craft designed to dive deep into the ocean might employ the new method of propulsion and control.

Each of the two bands on the model submarine holds 12 short, individually adjustable blades. Motion is controlled by varying the pitch of each blade during the revolution cycle. To ascend, for instance, the pitch of each blade is greatest on the downward cycle. The resulting downward force pushes the craft upward.

The experimental system has several advantages in addition to increased maneuverability. The absence of propellers at the extreme after end would enable the submarine to launch weapons through the stern or to tow objects, neither of which can be done with present-day subs.

Silence is another feature. The tandem propellers rotate more slowly than conventional screws—not more than 50 rpm—so they make very little sound. Because of the slow movement the individual blades carry comparatively light loads and create no cavitation.

The two bands rotate in opposite directions to minimize torque problems, and can drive the submarine through the water at speeds comparable to those of screw-powered undersea vehicles. The blade adjustment can also be used to control the attitude of the submarine at low speeds when standard runners and diving planes are useless.

In effect the bands are part of an inside-out electrical motor. The bands act as a moving armature and circle the stationary electric field next to the hull of the sub. The electrical system was tested before the submarine was delivered to the Navy.

The model was constructed in Holland. Tests are scheduled to be concluded in April.

Moving Up the Ladder

In 1946 an Iowa youth joined the Navy to get away from school and studies.

However, it didn't quite work that way. Immediately after he finished boot camp, destiny and BuPers sent him to electronics school. Then to a 28-week advanced ET course, then to a 52-week electronics school, then a four-week electronics school, and finally to instructor's school.

After his first school he must have yielded to the inevitable or had a change of heart, for he graduated near the top of his Navy classes in the last four courses.

By the time he was accepted for participation in the Navy Enlisted Scientific Education Program (NESEP), his attitude toward study had already brought results—he was a master chief electronics technician.

Some weeks ago he reached the pinnacle of his scholastic career when he graduated high in his college class after a four-year NESEP course, completed Officer Candidate School and was commissioned a lieutenant (junior grade).

He had been accepted for NESEP in 1959 and, at the same time, was chosen for a commission under the LDO program. After careful consideration the young man, Donald O. Burrell, decided to turn down the LDO commission in favor of a NESEP college education. Through that program he entered Kansas University's Electrical Engineering School, and in four years never missed the dean's list for academic achievement. Of a possible top mark of 3.0 Burrell graduated with a high 2.8 average.

While a NESEP student, he was commended for his willingness to assist other students who were having difficulties.



LTJG Donald O. Burrell, USN

After receiving his diploma in Kansas, Burrell was ordered to the Officer Candidate School at Newport, R. I., where he completed the school 14th in a class of 955. While at OCS his leadership qualities won him the Kiwanis Club Award, which consisted of an officer's cap to go with his commission.

Vice Admiral Smedberg, Chief of Naval Personnel, cited the new officer's achievements as an enviable goal for all young men who choose the Navy as a career.

LTJG Burrell was born in Mason City, Iowa, in 1928 and enlisted as a seaman recruit on 3 July 1946. Twelve years later he was a master chief. He earned the World War II Victory Medal, the Navy Occupation Service Medal, the China Service Medal, the Korean Service Medal, the National Defense Service Medal, the United Nations Service Medal and the Good Conduct Medal.

New *England* Commissioned

A new guided missile frigate, USS *England* (DLG 22), was commissioned on 7 December at Long Beach, Calif. The ship was named for Ensign John C. England, USNR, who was killed 7 Dec 1941 while serving aboard the battleship USS *Oklahoma* (BB 37).

The frigate is the second USS *England*. The first was DE 645, a destroyer escort which sank six enemy submarines during one 12-day period of World War II and won the Presidential Unit Citation for her antisubmarine warfare record.

The newest *England* will be homeported in Long Beach, Calif., as a unit of CRUDESFLOT Three.



Bureau Receives Famed Historical Paintings

Framed reproductions of The Signing of The Declaration of Independence, *painted by COL John Trumbull, who served in the Continental Army, and* The Signing of the Constitution of the United States, *by Howard Chandler Christy, have been donated to the Bureau of Naval Personnel by the Society of the Cincinnati. Accepting for the Bureau is VADM W. R. Smedberg, III, (right), Chief of Naval Personnel. RADM J. W. McElroy,* USNR *(Ret.), a member of the Society, makes the presentation.*

These prints were selected by the Society because, in its opinion, they represent the two greatest events in American history and should serve as a constant reminder to naval personnel of the importance of these events, and how former naval officers and men have fought for their preservation.

The Society has also made the reproductions available to selected Navy Recruiting Offices across the United States. As additional prints become available, all Navy Recruiting Offices will be provided with them.

No Washday Blues for VT2

There's singing in the wash rack at Whiting Field. "Blasts the dirt right down the drain" —that's what members of Training Squadron Two are singing. They're referring to their new homemade steam jenny — one that takes a lot of the muscular pain out of washing down aircraft and transforms the task into a near pleasure.

It wasn't always like this. Only a short time ago VT2 had as many headaches as any other outfit, trying to keep the standard electric-kerosene steam jenny in operation and off the junk heap. When it was broken down, there was always the delay getting parts to repair it.

And, even when it worked, it wasn't what you'd call the answer to a plane washer's dream. Grease and dirt were reluctant to loosen their grip on the aircraft when prodded only by the low pressure of the old jenny's steam spray, so a lot of elbow grease was needed to complete the job properly.

And many's the time the old jenny threatened to blow up.

Now that's all changed. Two men —LT Harvey Teagle, VT2 Ground Support Equipment Officer, and Gordon Jones, the base public works inspector—combining their engineering talents, manufactured a new rig. It uses live steam piped from the station's boilers instead of depending on the fickle kerosene heater to manufacture steam.

The inventors machined a larger steam nozzle and attached it to a hose larger than the one that was used on the old jenny, giving their rig more steam pressure. Then they installed a device which mixes liquid soap with the steam.

Total cost of the new installation was $233, considerably less than the overhaul cost of the old system. Now crews can clean 15 aircraft a day instead of 10, with less effort.

(The Bureau of Naval Weapons has assigned projects to the Naval Air Station, Alameda, and Marine Corps Air Station, Cherry Point, to study cleaning requirements and modernize cleaning equipment and facilities. As a result of this program the Naval Air Station has developed a new, portable, high pressure cleaning machine which is now available to the Fleet under Federal Stock Number Rx 4920-986-0809-S030, and is preparing a specification covering a new portable steam cleaning machine which is a great improvement over existing steam cleaners.—ED.)

Hey, Fellas! — Pipe This

U. S. Navymen mean many things to many people overseas. In the small village of Mabayo in the Philippine Islands, Navymen will be remembered primarily for one thing: they gave the people running water.

The villagers did not have this amenity of civilization when crewmembers of USS *Pollux* (AKS 4) first visited them. They had to trudge uphill for about a mile through dense jungle and carry their water back from a creek.

Mabayo is a small fishing village on the Bataan peninsula about 10 miles from the U. S. naval base at Subic Bay. The villagers live in rows of thatched bamboo huts, situated between the rain forest and the lagoon which opens to the South China Sea.

There is one dusty road through the village, wide enough for four men to walk abreast. Children run around half-naked. The villagers do not have much—they live hand to mouth. But of all the things they lack, compared to the industrialized sections of the Philippines, nothing has worked a hardship greater than the inconvenience of being without water.

Though Mabayo is in an area of high rainfall, the water drains quickly from the land. Even at the height of the rainy season the creek does not stay above its normal level for long. The villagers neither knew the way, nor had the means, to harness a water supply for themselves.

Pollux, homeported in Yokosuka, Japan, makes frequent trips to Subic



AIRCRAFT OF CAG-7 fly in diamond formation while passing to port of *USS Independence* in the Mediterranean.

Bay, and the crew somehow learned of the plight of the Mabayo villagers. They decided to do what they could to help.

First, the situation was surveyed by a party from *Pollux*. Pumping a few thousand gallons of water into some jury-rigged storage facility would provide only temporary relief, they decided. They thought it would be best to work out a more permanent solution to the problem.

One of the members of the first survey party from *Pollux* was a midshipman from the Philippines, attending the U. S. Naval Academy, who was on his summer cruise. He acted as interpreter and enlisted the help of the villagers in a scheme to pipe water down from the creek.

The *Pollux* survey party decided that the least expensive and most positive way of assuring a safe, reliable and adequate water supply would be to build a small dam across the creek. From the dam a pipeline would be run through the jungle to the village. The pipe would be laid along both sides of the road, with a tap outlet at each hut.

Personal contributions by crewmembers of *Pollux* financed the purchase of the necessary supplies—cement, sand, tap fittings, and pipe of various diameters.

Work was begun first on the dam, then the pipe was laid through clearings in the snake-infested jungle. Here the villagers with their machetes were of invaluable assistance.

The rainy season and long periods at sea for *Pollux* caused the project to move at a slow pace. But after six months, having overcome every conceivable obstacle, the task was completed. For the first time in history the villagers of Mabayo now enjoy the convenience of a continuous supply of fresh water at their doorsteps. To celebrate the event the men of *Pollux* were invited to a gay fiesta.

Silent Language

Silent language is the specialty of a uss *Ajax* (AR 6) Navyman in Yokosuka, Japan. John A. Lusk, ET2, spends his off-duty hours teaching a group of Japanese deaf teenagers the English version of sign language and lip-reading.

His teaching is conducted after school hours on the grounds of the Yokosukashi Shiritsu Ro School or in private homes. Lusk spends an average of four nights a week with his students.

English sign language is almost completely new to the Japanese children. Although the English version is similar to European sign languages, no such similarity exists between the English and the Japanese.

Many Navymen teach verbal English to Japanese groups, and most of them pick up a smattering of spoken Japanese in the process. Lusk's experience has been similar, except he has learned to read and write Japanese but has had little opportunity to learn to speak it well.

The *Ajax* sailor learned to speak English sign language while attending a university in Texas before his enlistment in the Navy. While at the school he volunteered to be a boat instructor for a group of deaf students and, in the process of teaching them boating, he learned their language.

When the ship enters Sasebo, Lusk spends his liberty hours with the youngsters at the city's World Mission to Children Orphanage.

Lusk intends to enroll in a bible institute in Chicago after he is separated from the Navy, and then return to Japan in 1967 as a missionary to the deaf on the Japanese island of Kyushu.

EYEBALLING—Modern-day detection devices haven't reduced demand for sharp-eyed visual lookouts at sea.





THE HEAVY cruiser *USS Los Angeles* (CA 135), commissioned July 1945 and third ship named for the West Coast city, joins mothball fleet.

Los Angeles Retires

After many years of Pacific operations, USS *Los Angeles* (CA 135) has retired to the mothball fleet.

The heavy cruiser went into retirement at the Long Beach Naval Shipyard, bringing to a close—at least for the time being—a career that included a fair share of action and plenty of travel.

Los Angeles was built in Philadelphia and commissioned in July 1945. The cost of her construction was contributed by residents of Los Angeles through an 80-million-dollar war bond campaign. (*Los Angeles* was the third U. S. Navy ship named after the city. A World War I tanker and an airship also bore the name.)

By the time the cruiser had been shaken down, it was too late for her to play an active part in World War II.

She operated in the Shanghai-Hong Kong area until November 1947, then joined the Reserve Fleet.

Out of reserve for Korea, *Los Angeles* participated in the United Nations action from June 1951 to April 1953. (During one action, future CNO ADM Arleigh A. Burke observed that "*Los Angeles* is the only ship I have ever seen loading ammunition on one side and firing it off just as fast on the other.")

After Korea, *Los Angeles* again saw service off the China coast.

Working with the 7th Fleet over the years, *Los Angeles* made many cruises to the Far East and participated in countless operations.

She also served two years with the First Fleet, operating off the coast of California.

Those Dam CBs Are Everywhere

Seabees are frequently found building things in exotic places, so it should come as no surprise that Seabee Technical Assistance Team (STAT) 0902 is building an earth-compacted dam near the villages of Warin and Ban Khae in northeastern Thailand.

STAT 0902 numbers 14 volunteers who have been working since June on the Ban Khae Dam which, when completed, will insure a supply of water for the surrounding area during the dry season.

The Ban Khae Dam is the first of five small irrigation dams to be built by the Seabees in Northern Thailand. The STAT teams are serving as a part of the Thai Community Development Program assisted by the Agency for International Development. Logistic support for the team is being furnished by the Joint U. S. Military Advisory Group in Thailand.

The Technical Assistance Team was organized early in 1962 from volunteers who had no inkling as to what their assignment would be. They underwent rigorous training at Mobile Construction Battalion Nine Headquarters at Camp Kinser, Okinawa, before being assigned to the dam-building project in Thailand.

On Memorial Day 1963, the Seabees rolled into Warin with 20 pieces of heavy equipment and set up shop.

As usual, the Seabees haven't confined their energies to construction. The Thai SEATO Center at Ubon sent 10 students to work with and learn from the Seabees.

During the construction of the dam, the students have become skilled construction workers capable of handling future jobs by themselves.

Although the men work long hours, they have made time to participate in village activities. It was their idea to borrow a screen and projector to show U. S. documentary films in the Thai language to the villagers.

They have also shared their well-stocked dispensary to treat the people's ills and have divided many a dinner hour between eating and participating in ball games with the village kids.

They also devoted more than three precious hours to hauling a water buffalo from an abandoned well into which it had fallen.

The finished dam will measure approximately 1350 by 60 feet and will irrigate rice paddies for miles around.

For the people around Warin and the smaller village of Ban Khae, the dam will mean fuller stomachs and a better life.

For the United States, it will mean infinite good will from the people of Thailand. —PFC Stuart Gorin

Schofield Launched

The guided missile escort *Schofield (DEG 3)*, third in a class of missile-armed escort ships designed for antisubmarine operations, was launched at Seattle, Wash., in December.

She will be fitted out with a *Tartar* guided missile installation, one five-inch 38-caliber gun, antisubmarine torpedoes, antisubmarine rockets *(Asroc)* and a drone antisubmarine helicopter *(Dash)*.

The ship is named in honor of RADM F. H. Schofield, USN, who during World War I served as a member of the Advisory Staff in Paris during the preparation of the naval terms for peace with Germany.

Schofield is 415 feet long with a beam of 44 feet and has a full load displacement of 3400 tons. The estimated commissioning date of the guided missile escort is not given.



WATER WORKS—MCB Six distillation plant made fresh water from the sea.



ON HIGH — Seabees construct antenna for a naval communications station built at Marathon, Greece.

The Greeks Have a Word for Them

SOMETIMES SEABEES CARRY out their base-building activities in strange, fascinating lands—such as Greece. At any rate, that's where the men of Mobile Construction Battalion Six have just built a naval communications station.

The station will become a link in our worldwide communications system. Much of the work involved procedures with which the talented Seabees are well familiar, but the project was not without its peculiarities.

The work included erection of over 100 major antennas and 11 support buildings—a challenge in itself. Added to this were the complexities and toil involved in establishing and maintaining a camp site to serve as "home" during the deployment.

An advance party arrived at the construction site on the plains near Marathon, Greece, in late 1962, and began on-site preparations for the arrival of the main body of MCB-6.

They set up a camp site, using the eight-man, 16-feet by 32-feet tents which are familiar equipment to Seabees. Power was supplied to the camp by diesel generators, and distillation units commenced their endless task of supplying water. The Bees experienced the full dimension of advanced base living for which they are trained.

When the main body of the battalion arrived in February, Greece welcomed the 333 officers and men with one of its worst winters in years. Sleeping bags and foul weather gear were the Bees' only defense against the icy winds and snow that followed.

It takes more than that to divert Seabees, however. They sorted out the 18,214 tons of materials, put their 186 pieces of construction equipment to work, and *Presto*, up went the new station.

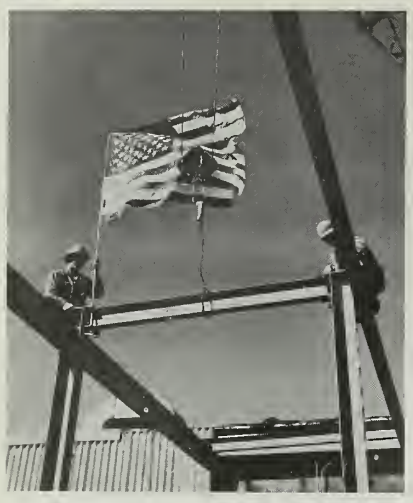
Meanwhile, small comforts were added to the campsite. An improvised Exchange began operations, a laundry went into operation, and a retreat was built. Soon they even enjoyed the luxury of running hot water.

The men of Six fulfilled another mission during this deployment. Because of their exemplary conduct and the friendliness they extended to the Greek people in surrounding communities, they were labeled "Ambassadors of Good Will" by the people of this ancient democracy.



RECRUITING—Crown Prince Constantine of Greece is made honorary CB during visit. *Below:* Bulldozer challenges mud during construction work.





IN KEEPING with MCB-4 tradition, steelworkers raise flag over last piece of steel erected on a building at NAS Argentia, Newfoundland.

Seabees Build on Okinawa

Seabees are nomads at heart, but sometimes they show signs of domestication. Take the Seabees on Okinawa for instance. For years, they moved from home to home—Camp Kue, Marine Corps Air Facility Futema and, most recently, Camp Kubasaki on Buckner Bay

When the Marines at Camp Kinser moved out, however, the Navy staked a claim to Kinser's 355 acres. Here, in the middle of Okinawa, a Seabee community began emerging from the coral ridges and the patchwork farms to take its place beside Rota's Silver City and the Seabee Camp at Gitmo.

Except for its water supply and electricity (which it purchases from the Marines at nearby Camp Hague) it is a self-supporting, complete military community with medical and dental dispensaries, a 1300-man mess hall, EM club, CPO and officers' messes, ham radio shack, theater and other special services facilities.

The Ryukyus Exchange System operates a base exchange, laundry, drycleaning, tailor and barber shops there.

On the workaday side there are, in existence or under construction, all the warehouses, armories and shops necessary to provide the tender loving care necessary to keep the Seabees' standard allowance of basic construction items in operation.

Although no self-respecting Seabee would ever admit to liking his current station, Camp Kinser has much to offer. Local cabs are at both gates to whisk the liberty-bound Seabee to nearby Koza City for the nominal sum of 35 cents, and an island-wide bus service is available.

Beaches, bowling alleys and other fixed recreational facilities abound on Okinawa.

The countryside around the camp is pleasantly dotted with green hills, rice paddies and red clay fields of sugar cane and pineapple. On the camp proper, the terrain and pine forests are ideal for infantry training.

Other unimproved land is licensed for farming by the nearby villagers, who make up an unending procession of farmers with sickles, mama-sans with bundles, kids, carts and critters.

The men of Camp Kinser keep themselves busy with a heavy schedule of both construction and military readiness training. In addition, they take on community relations projects such as hauling water to nearby villages each day to alleviate the effects of Okinawa's worst drought in a century.

The current quarters at Kinser are a collection of huts which, like the Seabees who occupy them, are veterans of other Pacific deployments. Later, the Seabees plan to move into more permanent facilities.

For the 'Bees, it will be a real pleasure to build a permanent home for themselves, for a change.

—Anson C. Perkins, CDR, USN.



REWARDING — B. J. Fielder, AD1, USNR, is congratulated by his CO after getting Navy Commendation Medal for saving a pilot's life.



SECNAV COMMENDATION for Achievement Award, pinned on chest of Frank D. Henderson, ETC, FTC, Newport, by CAPT Albert W. Cox.

Fields Navy Commendation

A Navy plane captain who rescued his pilot from a burning aircraft last March has been awarded the Navy Commendation Medal. The Navyman, Billie J. Fielder, AD1, is stationed at Grosse Ile, Mich.

Fielder's aircraft, a twin-engine C-117, crashed a mile from the Memphis, Tenn., Naval Air Station and caught fire upon impact. The passengers and crew were able to escape from the aircraft without difficulty, except for the pilot, who was slumped unconscious in his seat.

Plane Captain Fielder went to the pilot's aid, freed him from his seat and lifted him out of the cockpit window of the burning aircraft. Crewmates on the ground carried the aviator away.

No one was seriously injured in the crash. Escaping just before the flames enveloped the plane, Fielder suffered a hip injury. The pilot sustained cuts and bruises.

Oak Ridge Commissioned

The first floating drydock of the ARD type designed to accommodate *Polaris* submarines was commissioned at the Norfolk Naval Shipyard, Portsmouth, Va., in October. She is USS *Oak Ridge* (ARDM 1), named for Oak Ridge, Tenn.

Oak Ridge was converted from ARD 19 by lengthening it 42 feet and deepening it 11 feet. She is now 533 ft., 11 in. long and 81 ft. wide, with a lift capacity of 8000 tons. She will be manned by a crew of 110 enlisted and three officers.

Top Straight Shooter

Joseph J. Witherell, PR1, USN, of Training Squadron Two had never shot a pistol before he joined the Navy in 1955, but he recently was presented the highest Navy marksmanship award for pistol shooting, the Distinguished Pistol Shot badge.

The award, given by the Chief of Naval Personnel, is extremely difficult to attain. Only about three or four men qualify for it each year; only 119 have been awarded the badge since 1925, when recognition for exceptional performance in small arms in the Navy was started.

Witherell began shooting his way to small arms fame with a .45-caliber service pistol, winning several excellence-in-competition awards. He won the bronze award in 1959, the silver in 1962 and the gold in 1963. The gold one was won when he had a broken left arm.

These three awards combined were enough to qualify him for the distinguished badge.

Next Witherell plans to start shooting for the Distinguished Marksman badge for riflemen.

Change of Command Is Big Hit

It's a real thrill for a golfer to make a hole in one, and for CAPT W. B. Tracy, Jr., USN, Commanding Officer of NAS New Orleans, the feat was an occasion for a double celebration.

Tracy had just completed a change of command ceremony in which he assumed command of NAS New Orleans. It was the first time he had tried out the station's course.

On the seventh, a par three hole, he teed off with an eight iron, watched the ball bounce onto the green, then lost sight of it. It had plunked into the cup for his first hole in one in 26 years of golfing.

CAPT Tracy likes his new command.

Judo Black Belt

Hubert Ehrlich, YN3, USN, received his first degree black belt, or *shodan*, when he successfully demonstrated *nage no kata* for the Hiroshima Judo Society recently at the Hiroshima Sports Center.

Nage no kata consists of 18 general judo throws. Ehrlich's judges were Japanese instructors of the Judo Society.

Ehrlich is serving with Patrol Squadron 50, Fleet Air Wing Six.

SIDELINE STRATEGY

THERE ARE THESE three regulars in MCB-7 down in Gitmo. Look at them and you wouldn't think they were anything special. One is a personnelman chief, the other two are Seabees.

One day Don Norman, CE1, says to Bobby Reeves, EON3, "What do you say we start up a pistol team here in the battalion so we can shoot it up against those teams on the other side of the base?"

Okay. So they learn how to hold a .45 pistol and start a pistol team. This PNC named Bob Kasper joins in it too.

Then it's the usual routine when people go all out over something for the first time, you know—practice, practice, practice. But by and by they feel they're ready for the big time.



So they take their pistol team and enter the base league. What happens?—they beat everybody. Beginner's luck, no doubt.

Next scene, our pistol shooters have won berths for competition in the COMTEN matches. So away they go, for the good name of the Seabees.

They win, knocking off all comers and sewing up the COMTEN pistol title. Then, instead of just lolling around the rest of the week, they enter the COMTEN *rifle* competition. Had they shot rifles before? Nope!

Anyway, they all go ahead and place third in the rifle team competition, in spite of the novelty of the M-1. This wins for them spots as COMTEN reps in Fleet competition.

At LANTFLEET in Jacksonville they deploy their forces across the board — no more messing around. They wind up second for teams in BOTH rifle and pistol shooting.

There's more.

Next, All-Navy shooting, where the team takes second in pistol and fourth in rifle. So they go on to the Inter-Service matches. Here they do well enough firing against the top shooters in all branches of the service to be invited to the sharpshooter's paradise—Camp Perry, Ohio, site of the U. S. National Championship matches. That's the top.

Give it a try. You just never know until you do.

★ ★ ★

As coach of a losing soccer team that has a winning personality, ENS Joe Monroe of USS *Johnston* (DD 821) remarks, "We're building character this year."

For that job he has lots of cooperation from the other 10 soccer-playing crewmembers of this Med-deployed tincan. With almost less than no experience, this hardy lot is taking on teams from Italy, France and Turkey at their own game.

Though Goalie Monroe confesses openly that his boys achieved less than brilliant results in the point-scoring department, he is quick to add they never fail to put up a noble effort.

Bill Howard, JO1, USN

Here's Timetable for Fame And Glory for Navy Athletes

Here's the 1964 schedule of All-Navy and Inter-Service sports championships—also a word to you athletes hopeful of participating in any of the listed events.

As you probably know, participation in any sports events leading to All-Navy championships is purely voluntary. What you may not know, or realize, is that if you're a high-caliber athlete the Navy *wants* you to give it a try.

In the first place, a good portion of the teams or individuals who qualify for All-Navy championships automatically go on to represent the Navy in Inter-Service competition. *And*, most of the Inter-Service championships are picking grounds for service personnel who will go on to represent the United States in international competition.

It's always good to have a sprinkling of Navymen on our international teams to help bring home the bacon.

The schedules recently released by the Bureau of Naval Personnel give the date and place for each event. Information such as squad sizes, rules, etc., will be released later. Also, the Bureau has assigned regional coordinators for 1964 preliminaries as follows:

- North Atlantic region: Potomac River Naval Command.
- South Atlantic region: Commandant Fifth Naval District.
- Pacific Coast region: Commandant 13th Naval District.
- Western Pacific region: Commandant 14th Naval District.
- Atlantic Fleet region: Commander Service Force, Atlantic Fleet.

The schedules:

ALL-NAVY

Basketball	2-7 March	Naval Station, Norfolk, Va.
Swimming	13-14 March	Naval Training Center, San Diego, Calif.
Volleyball	7-10 April	Naval Air Station, Memphis, Tenn.
Boxing	15-17 April	Naval Shipyard, Mare Island, Calif.
Bowling	19-22 May	Naval Station, Long Beach, Calif.
Tennis	27-31 July	Naval Station, Newport, R. I.
Golf	24-26 August	Naval Air Station, Whidbey Island, Wash.
Softball	14-18 September	Naval Training Center, Great Lakes, Ill.

INTER-SERVICE

Basketball	12-14 March	Lowry Air Force Base, Texas
Boxing	4-6 May	Camp Lejeune, N. C.
Track and Field	5-6 June	Marine Corps Schools, Quantico, Va.
Wrestling	9-13 June	U. S. Military Academy, West Point, N. Y.
Tennis	3-7 August	Naval Station, Newport, R. I.
Volleyball	13-15 August	Otis Air Force Base, Mass.
Golf	1-5 September	Fort Benning, Ga.

Note: All the above Inter-Service events except tennis and golf lead to Olympic trials.

Qualifying in Small Arms

Proficiency in small arms marksmanship is a qualification of the sharp (shooting) Navyman and a sign of real distinction throughout the service. In order to provide for uniformity in all the armed services and to enhance even more the prestige of these awards, revised conditions went into effect at the beginning of 1963. Recent correspondence indicates that a lot of Navymen are not up on these changes, so they are listed below.

By firing the service pistol or rifle in several recognized competitions you can earn gold, silver and bronze Excellence - in - Competition Badges which you are authorized to wear on your uniform.

In addition, by accumulating sufficient credit points in these competitions you can earn the Navy's highest award for small arms competition—the Distinguished Pistol Shot or Distinguished Marksman (rifle) badge.

Awards are made on the basis of individual performance. The highest scoring 10 per cent of all participants (excluding already "distinguished" shooters) will win Excellence-in-Competition awards in each competition.

The gold badge will be yours if your final pistol or rifle score ranks with the top one-sixth of the highest 10 per cent of your category. The next highest one-third of the top 10 per cent will receive silver, and the remainder, bronze.

Credit points toward the Distinguished badges are gained at the rate of 10 points for a gold, eight for silver and six for bronze awards.

To be eligible for a Navy Distinguished Badge you need a minimum of 30 credit points. These can be accumulated from year to year, but points are gained in a maximum of four recognized competitions in any one year. Normally these four should include the Atlantic or Pacific Fleet and All-Navy competitions.

However, when unable to participate in these you are authorized to fire for a maximum of 20 points in Army area, Marine division or Air Force command and regional matches. If you are successful in any of the above competitions, you will not earn Navy Excellence awards, but will earn points toward a Distinguished award.

Remember, you do not compete against individuals already "distinguished." That is, in qualifying for the top 10 per cent, you are competing against persons in your own class.

Also, Navymen already holding "legs" toward distinguished qualifications will automatically be credited with 20 points towards the Distinguished designation.

Navymen interested in competing in future annual events should contact the district small arms marksmanship instructor in their area. It's not too soon to get started now.

Iron Men at Quonset

Roger C. Carpenter, TD3, USN, is Fleet Air Quonset's "Iron Man," after outperforming 35 contenders in the first physical fitness tournament held at NAS Quonset Point, R. I. Carpenter clinched the title by doing 404 sit-ups in one of the six events in the tournament.

The physical fitness tournament was held to inspire new interest in the Navy's physical fitness program. Points were awarded on the basis of one for first place, two for second, three for third, etc., in each of the six events. The individual and team with the least number of total points won respective individual and team titles.

Individual top scorers in the five other events of the tournament were:

• Pull-ups (24)—Richard M. Williams, AD3, USN.

• Push-ups (90) — LT Owen B. Lovejoy, USN.

• 300-yd. shuttle run (41.2 seconds); broad jump (9 ft., 2 in.); and jump and reach (29 in.)

—ENS G. G. Golden, USN.

One Reason CBs Can Fight

There's a reason for the lively interest in boxing that exists in Mobile Construction Battalion One, and that reason is Chuck Preston, EOH2, USN.

Last year Preston managed the Construction Battalion Center, Davisville, R. I., boxing team for the First Naval District matches. The CBC team placed second in this tournament. Preston was then picked to coach the COMONE squad for the North Atlantic Regionals held in Bethesda, Md. His eight-man team won three bouts there. He was next selected by the coaches at Bethesda to coach and train the North Atlantic squad for the All-Navy finals. The team won the All-Navy title.

Preston's knowledge of boxing stems from his association with some of the game's best, and many years' experience in the ring.

In 1939, at age 14, he started fighting in the 112-lb class in the Police Athletic League of his hometown, Pittsburgh. He fought there until 1943, when he entered the Army. Then, on the Army special services squad, Preston fought on the same team with Joe Louis and Sugar Ray Robinson, Another acquaintance of his is Billy Conn.

Fighting as a middleweight in 1949, Preston won the All-Army crown. In 1955 he reached the finals in All-Navy competition.

Now Preston is sharing his knowledge of boxing with a few ring hopefuls in MCB-1, and it's a bet that more will be heard of them.

—Jerry Derrick, JOSN, USN

1964 CISM Calendar of Sports Events

The 1964 calendar of events for the 32-nation military sports organization, CISM, has been released.

The calendar was approved at the 18th General Assembly of CISM (Conseil International du Sport Militaire) held at Casablanca, Morocco, which was attended by representatives from 26 of the 32 member nations.

Another action of the General Assembly was the extension of invitations to Algeria and Senegal to join the 15-year-old organization. It was also decided that a liaison office will be established between Africa and CISM's permanent secretariat in Brussels, Belgium, because of the interest Central African nations hold for CISM.

CISM holds annual championships in skiing, cross-country, boxing, basketball, wrestling, track and field, aerial pentathlon, fencing, military pentathlon, swimming, naval pentathlon, shooting, volleyball, modern pentathlon and soccer. Judo and parachuting will be added in 1964.

In 1963, the highest level of participation in CISM history was recorded, with 150 teams taking part in 12 competitions.

The calendar of 1964 events:

EVENT	DATE	LOCATION
Crass-cauntry	22 Feb	Maracca
Ski Week	22 Feb-1 Mar	Sweden
Baxing	20-30 Apr	Tunisia
Madern Pentathlan	14-22 May	USA (Fart Sam Haustan)
Judo	16-22 May	Karea
Wrestling	Secand half May	Turkey
Parachuting	1-4 Jun	France
Valleyball	1-12 Jun	Halland
Swimming	10-20 Jun	Italy
Military Pentathlan	25 Jul-1 Aug	Narway
Sea Week (Naval Pentathlan)	2-9 Aug	USA (Naval Academy)
Track and Field	5-12 Aug	Spain
P.A.I.M. (Air Pentathlan)	15-25 Aug	Greece
Fencing	15 Aug-1 Sep	Argentina
Basketball	25 Aug-2 Sep	Syria
Saccer	Regianal eliminatians	Site af finals ta be determined later
Shaating	Na firm date	Switzerland may be hast
First Executive Cammittee Meeting	2-4 Mar	Iraq
Secand Executive Cammittee Meeting	First half Jul	USA (Military Academy)
19th General Assembly	First week in Nav	Mexica

Bryce Canyon Has Pull

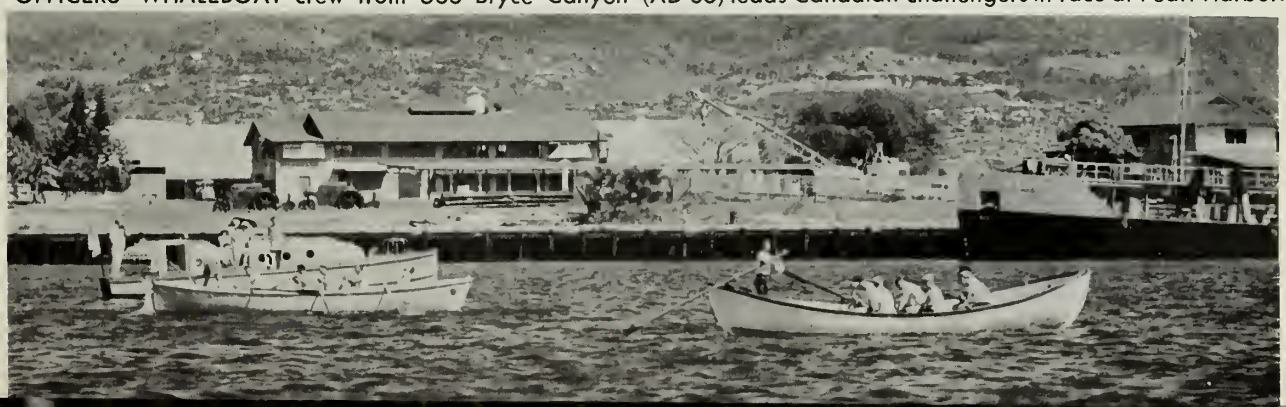
A double whaleboat race between crew members of USS *Bryce Canyon* (AD 36) and the Canadian fleet maintenance ship HMCS *Cape Breton* (ARE 100) in Pearl Harbor late last year resulted in one win and one defeat for each.

The races were conducted on a half-mile course between *Bryce Canyon's* berth at Ford Island and *Cape Breton*, moored at destroyer row.

In the first race, with the U. S. enlisted men matched against *Cape Breton's* enlisted crew, the Canadians gained an early lead and remained ahead until the end, winning by four boat lengths.

The Canadians also gained an early lead in the officers' race, but were overtaken and defeated by *Bryce Canyon's* team.

OFFICERS' WHALEBOAT crew from USS *Bryce Canyon* (AD 36) leads Canadian challengers in race at Pearl Harbor.



THE BULLETIN BOARD

This Is the Account by a Former Navyman Who Wanted Out

The saying goes "The grass is always greener on the other side." Everyone knows this isn't *always so. One such person—an ex-Navy Supply Corps lieutenant—recently wrote to the editor of the Supply Corps Monthly* Newsletter *saying:*

"Having been in civilian industry for several months, I have tried to make a comparison of the potentials of both a Supply Corps future and one in industry. There is no comparison! If the enclosed article might prevent other young officers from making the same mistake I did, please publish it."

While this individual – who for obvious reasons wishes to remain anonymous – writes particularly about the Supply Corps, ALL HANDS has received permission to publish this report because we feel that what he has to say has applications much further afield.

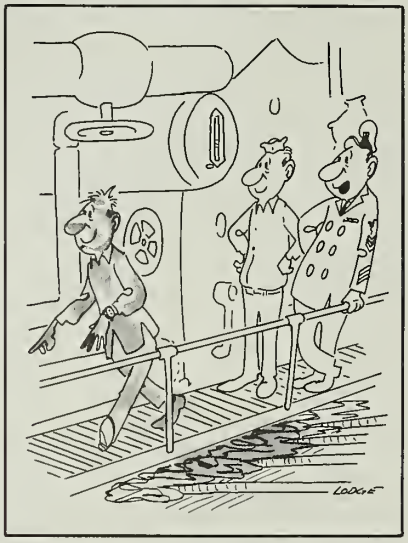
"You have to be crazy to want to stay in the Navy." "Only a man without ambition would make the Supply Corps a career." "I can do better on the outside."

I'm sure nearly all of us have heard these statements made by young Supply Corps officers whenever the pros and cons of a Supply Corps career are discussed. Speaking from my own personal experience I can state, without qualification, that the above quotes are not valid.

I was a Supply Corps officer. In fact, I applied for and was augmented into the Regular Navy. Because of what I now must consider my ignorance or stupidity—no other words being suitable—I gave up my Regular commission, reverted to Reserve status and asked for release to inactive duty. I had heard statements similar to those above so often, I began to believe them and decided I *could* do better as a civilian; I *would* be lacking ambition if I failed to enter the business world that abounded with opportunity.

Civilian life has convinced me I was wrong—and if this article sways one officer from making my mistake, I will consider the writing of it worthwhile.

All-Navy Cartoon Contest
LCDR Billups E. Lodge, USN



"I sent him to the bilges to look for the Golden Rivet . . . and he found a gold watch."

I left the Navy to take a position as a contract administrator with a subsidiary of a large chemical corporation. I was offered a salary nearly $1500 in excess of what I made as a Navy lieutenant. Shock number one came when I brought my first paycheck home. The number of dollars *more* I actually brought home could be counted on the fingers of my hands. My federal income tax deduction was more than doubled, as was my Social Security payment.

A quick computation also indicated that the much higher income tax deduction would not eliminate the need to pay several hundred dollars additional tax when I submit my return.

New deductions appeared on my pay record. A healthy deduction was required to insure my good standing in the company's retirement program. A monthly fee was withheld from my salary to cover my participation in the group medical program provided. All in all, the $1500 salary increase virtually disappeared before it reached my pocket.

Not only was it now necessary to make a monthly payment to cover my medical insurance program, but also my monthly financial budget now included numerous doctor bills which did not appear while I was on active duty. Though my employer's medical program is probably one of the best in industry, it did not cover routine doctor visits, the full amount of having my daughter's tonsils removed, or the medical care my wife required in the nine months prior to her delivery of our last child.

I SUDDENLY REALIZED that my Navy pay wasn't so bad after all and the particular fringe benefit called medical care could not be matched by civilian industry.

In a comparison of leave policy, civilian industry again came out second best. Whereas military leave is earned at two and a half days per month of active service, leave or vacation in the industry I know is earned at five sixths of a day per month. Ten-day vacations are allowed individuals working with my company. After 10 years, vacations are increased to 15 days and after 20 years' service, employees are authorized 20 days' leave per year. A lifetime of employment with a civilian company does not provide the number of days' leave per year the military provides individuals from the onset of their careers.

The civilian retirement programs were my next disillusionment. I had not expected to join a retirement program that would allow me to start collecting benefits after 20 years as the Navy allows. However, neither did I expect to have to contribute so much to receive so little at age 65. My contribution toward my retirement annuity amounts to three per cent of my salary annually. Yet, at age 65, after 35 years with an organization and assuming I never change employers, my annual pension check would not come near one half of my regular working salary.

I THINK my biggest disappointment in my civilian position was the lack of responsibility provided. I had assumed my salary would warrant a substantial degree of responsibility. However, this was not the case. The company limited my authority and virtually made me feel like a boot seaman having to learn every phase and function of the operations.

Having been assigned to responsible Supply Corps billets during my naval time, I found my new, carefully supervised assignment completely dissatisfying. I had failed to see the faith and trust the Navy had in my abilities and efforts until I was placed in a position where this confidence in my ability did not exist.

The military promotion procedure, though not perfect, is a vast improvement over any I have encountered in industry. The old adage that you are promoted when your boss dies is still quite prevalent in today's business world, but even the death of an immediate supervisor does not always assure promotion.

Every civilian company, when attempting to lure you into its employ, will insist it promotes from within, and that advancement opportunities abound in the organization. But in my first six months with my present employer I have seen the company bring in a new purchasing agent, hire a new manager for a special contracts department, and employ an outsider as the company's records manager.

All were brought in from outside the company on the grounds that no one in their 30,000-employee organization had the abilities or experience needed. This indicates to me that "promotion from within" is a convenient catch phrase of personnel departments rather than an effective advancement policy of companies.

THERE ARE MANY other aspects of Navy life both my wife and I miss. No longer can we look forward to the excitement when orders are due to arrive. No longer do we feel we are actively participating in the protection of our country and its future. The sense of doing something important, something vital, is now missing.

Most of all, we miss the pleasant, friendly relationships we enjoyed with fellow officers and their families. In my present civilian position, my wife has yet to meet any of my co-workers, their wives or families. The only knowledge she has of my department head, my immediate supervisor or my associates is what I tell her. We have not been invited to call on my superiors. Courtesy calls are not part of civilian life.

When we moved to our present location in conjunction with my accepting my present position, no one asked whether we needed help, nor did anyone at my new plant offer assistance. What a difference from Supply Corps life and its associations.

The next time someone tells me a Supply Corps career is not challenging or responsible, he had better be ready for a lengthy rebuttal. I have experienced both the challenges of the Corps and the challenges of civilian industry and there is no shred of doubt in my mind where the most opportune future lies.

If this afternoon's mail brought me orders to active duty and the chance to make a career out of the Navy, I'd be ready and on my way by tomorrow morning. That's how convinced I am that the Navy is the place for the man with ambition.

Although all Navymen will probably never agree on the prospects of life "outside," the discussion is an important one.

One opinion, however, no matter how strong, remains one opinion. So we'd like to hear of other, similiar experiences.

WAY BACK WHEN

Pearl's Tank Farm

During World War II more than 3000 men labored with rock-drilling equipment to carve an underground tank farm beneath Red Hill on Hawaii's island of Oahu.

The farm contains 20 tanks, ranged side by side, extending at 100-foot intervals into the bowels of the hill. Each capsule-shaped tank is 250 feet high and 100 feet in diameter. Altogether they can hold 252 million gallons of oil — enough to fill about 60 tankers.

The tops of the tanks lie from 110 to 175 feet beneath the surface of the hill. The tanks extend downward to a surface 150 feet above sea level. They are connected with the Pearl Harbor Naval Base's fuel docks by a three-and-one-half mile tunnel which accommodates the pipe lines and runs uphill from the entrance through a subterranean pump house. At intervals, there are steel doors which close automatically to prevent flooding.



Transportation in the tunnel and the tank farm is provided by a subway which will never take prizes for comfort or aesthetics. It consists of a stubby yellow machine which clatters along a narrow track and pulls two wire enclosed cars in which passengers ride.

The train's speed is about 15 miles per hour and, when it rounds a curve, its wheels shriek with the gusto of a thousand banshees.

The train travels along the tunnel at the base of the tanks. An elevator leads to the upper access tunnel from which the tanks can be entered.

The access hatches to the tanks are about 50 feet below the dome. A catwalk extends to the center of the tank to a compressed air elevator scaffold which was used during the tanks' construction.

When the tank farm was new, its existence was a top secret. Since World War II, however, it has ceased to be considered hush-hush—althaugh it is understandably not one of Hawaii's tourist attractions.

The Navy considers the subterranean farm safe from anything except a direct hit from a nuclear bomb. Its safety may account for the fact that the Navy will soon convert the four tanks farthest inland and most deeply buried in the rock to hold aviation gasoline and jet fuel.

These tanks will be cleaned and fitted with fireproof bulkheads. Miles of new pipelines will be installed to carry fuel for a changing Navy to the sea where ships will transport it to the missiles and aircraft of the Pacific Fleet.

Navy Duty in Scotland Is a Once-in-a-Lifetime Opportunity

WE CAN ONLY assume, after reading information concerning living conditions in Edzell, Scotland, that any Navyman and his family receiving orders to the facility located near that village are pretty lucky people. The situation sounds ideal, despite an average temperature in the middle 50s and, to quote the pamphlet "the wind from the North Sea is often present in the winter, and warm clothing for the entire family is essential."

The scenery on and around the base is reputed to be some of the finest in Scotland.

Beyond the flat country which begins at the sea, the level of the land gradually rises to the foothills of the Grampian Mountains, the gateway to the Western Highlands of Scotland, where small burns (small rivers) run into magnificent lochs (lakes) and deer run wild through the heather. The hills abound with game birds and the streams are full of salmon and sea trout.

(Golly! It must be unusual. Just fancy an official naval publication waxing poetic.) Many famous Scottish battles took place in this area, and the castles that housed the chiefs of the participating clans are located roundabout.

Surrounding the village are pine woods where the air is fresh and bracing. Beautiful walks and pleasant excursions may be taken in every direction, including a visit to historic Edzell Castle, the ancestral home of the famous Lindsay Clan. The rendezvous of kings and princes, American millionaires and Indian maharajahs, Edzell is claimed to be "the healthiest spot in Scotland."

Near Edzell is the village of Fettercairn which is known for its Macbeth associations. The ruins of the old castle of Kincardine, once a royal court, are also close by this village.

One word of warning about your future neighbors. They are not English, they are Scots. One refers to them as "Scottish" or "Scots," but never as the "Scotch." The latter term is reserved solely for their famous whisky (not "whiskey").

If arrival is by ship: Usual disembarkation is at Southampton, England. Proceed to London either by bus provided by COMNAVACTS UK or by train (if bus not available), and upon arrival in London take the train to Montrose, Angus, Scotland. The fare from London to Montrose is about £5 for an adult and £1 and 4 shillings for a child. This is reduced "forces leave" rates available for servicemen upon presentation of their identification card and for military dependents upon proper identification.

If arrival is by air: If disembarkation is at Mildenhall, England, proceed to London and follow the remainder of the instructions for arrival by ship. If disembarkation is at Prestwick, Scotland, proceed by train to Bridge-of-Dun Station, Scotland. Do not let anyone at Prestwick talk you into a bus or train trip to any other place in Scotland but the Bridge-of-Dun. Not, that is, if you want to get to Edzell.

Hotel reservations will be made for officers and married enlisted personnel if the command is advised of the approximate date of arrival. Advance reservations are essential during the summer tourist season (June-September).

British money: The pound sterling (£) is valued at approximately $2.80, and is composed of 20 shillings. A shilling is valued at 14 cents. Other units of exchange are: 10-shilling notes ($1.40), half crown, or two and one-half shillings (35 cents), two-shilling piece (28 cents), six pence (seven cents), three pence (pronounced "thrupence") (three and one-half cents), penny (one cent), and half-penny (pronounced "hayp'nee") (one-half cent).

Banking: Most of the banks in this area maintain "external" checking accounts for the benefit of U. S. naval personnel. Checks on these accounts may be written in either U. S. dollars or pounds sterling. The Edzell branch of the Bank of Scotland has been appointed as a depository for U. S. currency, and keeps a supply of dollars to accommodate base personnel. Stateside accounts may be paid by check drawn on the Edzell branch of the Bank of Scotland for a fee of about 42 cents per check. The Edzell bank will honor most stateside checks for cashing and/or depositing.

On-Station Housing: All on-station housing is completely furnished, including carpeting, except for dishes, cutlery, bedding, linen and other items of this nature.

Enlisted: Forty MEMQ public quarters are on the station. All of these quarters are two-story, duplex buildings, with three bedrooms.

Officers: There are 14 married officer public quarters on the station. Six units are two-story individual buildings with three bedrooms and eight units are two-story, duplex buildings, also with three bedrooms.

Additional on-station housing will become available when negotiations are completed for three MOQs and 14 MEMQs at RAF Inverbervie. This is the site of an RAF radar station which was closed in 1962 and is located approximately 20 miles from Edzell. The three MOQs are two-story individual buildings and the 14 MEMQs are two-story duplex type.

Off-Station Housing: The RAF Base at Edzell is located in a farming area, and there are very few unoccupied houses in the immediate area. Commercial transportation is limited, and at the present time it is not geared to the working hours of the base. Private transportation is therefore a requirement for personnel living off-station. The station maintains a list of available housing to assist new personnel in getting settled.

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"Change that to a cheeseburger, french fries and a milkshake . . . to go."

Initial Packing for the Trip: The climate demands that the majority of your wardrobe be warm and washable. This does not mean that dry cleaning is not available, but local dry cleaning may not come up to the state-side standard you're used to, especially with regard to synthetic materials. Dry cleaning and laundry service usually require four days and deliveries and pickups are made on station.

Children's clothing is usually available locally. Sizes and styles vary from those in the U. S., but as a rule, children's clothing is inexpensive and of good quality. School uniforms are not required for students. Men's and women's clothing is also available, and the prices and quality are reasonable. This is especially true of men's clothing and women's suits, dresses and sweaters.

Express shipment/hold baggage: Items essential to setting up housekeeping (sheets, blankets, dishes, pots, pans, cutlery, etc.) should be sent in the advance express shipment or taken in hold baggage. An adequate supply of warm clothing should also be included in one of these shipments.

Electrical appliances: The base and surrounding communities have an electrical supply of 220/250 volts at 50 cycles. Electrical appliances of American manufacture normally operate on 110/120 volts; therefore, they can be used in Edzell only with a transformer. One 2000-watt transformer is provided in each set of public quarters on the station. Additional transformers may be purchased from the Navy Exchange.

American-made clocks and televisions cannot be used in Scotland, and should be stored in the States. Television sets may be purchased or rented locally. Washing machines and refrigerators are furnished in public quarters on the station. It is suggested that all electrical appliances, except 60-cycle clocks and U. S. television sets, be included in household effects.

Television and radio tax: Television and radio sets are taxed in the United Kingdom. The required license to permit the operation of a television or radio set may be obtained at any post office. Household radios are taxed £1 a year, while a combined radio/television license costs £4. The tax on household radios permits you to operate several radios in your house; however, an additional £1 license is required for a car radio.

Automobiles: There are no restrictions on the importation of a privately owned automobile, as long as it is in a safe operating condition and in good mechanical order. A mandatory inspection of all automobiles manufactured over six years ago is now in effect in the United Kingdom.

Vehicles are entered free of duty and purchase tax, provided that a certificate is executed which requires the owner to export the car at a later date. A sale to another U. S. serviceman, who must execute the same type of certificate, is permissible.

Military personnel are not required to obtain a British driver's license, but most hold a valid U. S. license. However, if your stateside license expires while you are in Scotland, you can obtain a British driver's license for five shillings (70 cents) a year, upon the presentation of a certificate signed by the commanding officer.

Two other items are essential for operation of an automobile in Great Britain: Payment of road tax at the rate of £15 a year, and automobile insurance for which the yearly rates vary according to a number of circumstances. In regard to automobile insurance, a letter from your present insurance company attesting to the number of accident-free years you have driven will result in a "no claims bonus" policy with the resulting reduced rates.

Exchange gasoline is available at 25 cents per imperial gallon; however, gasoline at this price is rationed for use in driving to and from work. Gasoline on the local market is equivalent to 62 cents per imperial gallon.

Edzell is one of the areas exempt from the restriction imposed on shipment of foreign automobiles at government expense.

Pets: As there is a six-month quarantine for all pets arriving in Great Britain, personnel are advised not to take their pets during the tour of duty in Scotland. Costs of maintaining animals in quarantine are high and must be borne by the owner.

Temporary lodging allowance: The commanding officer may authorize up to 60 days' payment of temporary lodging allowance for personnel arriving with their dependents and living in a hotel pending availability of government quarters.

Medical and dental care: A 13-bed dispensary is in operation and is staffed by one medical officer and eight hospital corpsmen. Only military personnel receive inpatient care, while dependents (and military and civilian personnel) may receive outpatient treatment.

The station has a dental officer and a dental technician. Naturally, active duty military personnel have

NOW HERE'S THIS

Navy Key Men

The comman key, often used os o bodge af office or pasition, hos long been o symbol of trust, authority, ond control. Those wha wear Navy keys os port of their rating bodges are storekeepers, disbursing clerks, commissarymen, ship's servicemen, oviotian storekeepers ond stewords.

Men ond women who serve in these ratings ore responsible for Novy stores, funds, and service.

Mony of their ossociated duties involve the opplicotion of clerical optitude ond skill, in tosks performed with speed ond occurocy.

Few rotings are as concerned with recards and documents.

But, for the most port, the SK, AK, DK, CS, SD ond SH are responsible for food, clothing, pay, general ond technical supplies, ond personol items.—LCDR, F. H. Pattersan, SC, USN.



priority; therefore, since there are limited facilities, dependents should try to have any urgent or extensive types of dental treatment accomplished before their arrival overseas.

Educational Facilities: Children attend primary school at Luthermuir (four miles distant). The high school is located at Laurencekirk (eight and one-half miles distant). Transportation is provided to both schools from the station. Hot meals are provided to students at a cost of 14 cents per day.

Commissary/Navy Exchange: A commissary section is included within the Navy Exchange. This section has been enlarged until it meets most of the needs of the average family. Fresh meats, vegetables and milk, however, must be obtained on the local market. Unusual food or store items can be specially ordered or obtained at the U. S. Air Force commissary and store at Kirknewton, 115 miles from Edzell.

Recreation: Movies are scheduled regularly and recent releases are forwarded from the Motion Picture Exchange in London. An EM Club has been established offering the facilities of a bar and TV lounge; dances are scheduled regularly. Various athletic equipment, including a pool table, weightlifting equipment and sports gear is provided by Special Services. Many fine golf courses are available in the immediate area. The Edzell Golf Club has an excellent 18-hole course.

Hunting and fishing is available locally but permission must be obtained from the holder of fishing/hunting rights of the stream/land. There is also an active Rod and Gun Club aboard the activity.

A Navy Wives Club has recently been organized and is steadily growing with the influx of station personnel.

Uniform: The working uniform for officers and chief petty officers is Service Dress Blue Bravo, and for enlisted personnel Blue Bravo is prescribed. A full seabag is necessary. During the summer months (June through August) officers and CPOs are authorized to wear khaki. A clothing and small stores section has been established.

Civilian clothing may be worn after normal working hours and while on liberty or leave in Scotland.

List of Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

A New Kind of Love (2446) (C): Comedy; Paul Newman, Joanne Woodward.

In the French Style (2447): Drama; Jean Seberg, Stanley Baker.

Lilies of the Field (2448): Comedy Drama; Sidney Poitier, Lila Skala.

Rampage (2449) (C): Drama; Robert Mitchum, Elsa Martinelli.

The Great Victor Herbert (2450): Musical; Allan Jones, Mary Martin (Re-Issue).

Virginian (2451): Drama; Joel McCrea, Barbara Britton (Re-Issue).

Mr. Belevedere Goes to College (2452): Comedy; Clifton Webb,

The Redhead and the Cowboy (2453): Action Drama; Glenn Ford, Rhonda Fleming (Re-Issue).

The Son of Spartacus (2454) (C) (WS): Melodrama; Steve Reeves, Gianna Maria Canale.

Man Trap (2455) (WS): Melodrama; Jeffrey Hunter, Stella Stevens.

Captain Sinbad (2456) (C): Fantasy; Guy Williams, Heidi Bruhl.

The Secret Passion (2457): Drama; Montgomery Clift, Susannah York.

Stalag 17 (2458): Melodrama; William Holden, Don Taylor (Re-Isssue).

Submarine Command (2459): Drama; William Holden, Nancy Olson (Re-Issue).

Dark City (2460): Drama; Charlton Heston, Lizabeth Scott (Re-Issue).

Detective Story (2461): Melodrama; Kirk Douglas, Eleanor Parker (Re-Issue).

McLintock (2462) (C) (WS): Action Drama; John Wayne, Maureen O'Hara.

Harbor Lights (2463) (WS): Melodrama; Kent Taylor, Jeff Morrow.

For Love or Money (2464) (C): Comedy; Kirk Douglas, Mitzi Gaynor.

The Condemned of Altona (2465): Drama; Sophia Loren, Maximilian Schell.

A Place in the Sun (2466): Melodrama; Elizabeth Taylor, Montgomery Clift (Re-Issue).

Here Comes the Groom (2467): Comedy; Bing Crosby, Jane Wyman (Re-Issue).

The War of the Worlds (2468): Science Fiction; Gene Barry, Ann Robinson (Re-Issue).

Birth of the Blues (2469): Musical; Bing Crosby, Mary Martin (Re-Issue).

The V. I. P.'s (2470) (C)) (WS): Drama; Elizabeth Taylor, Richard Burton.

The Three Stooges Around the World in a Daze (2471): Comedy; Three Stooges, Joan Freeman.

"X" (2472) (C): Science Fiction; Ray Milland, Diana Van Der-Vlis.

Night Encounter (2473): Suspense Drama; Marina Vlady, Robert Hassein.

The Mating Season (2474): Comedy; John Lund, Gene Tierney (Re-Issue).

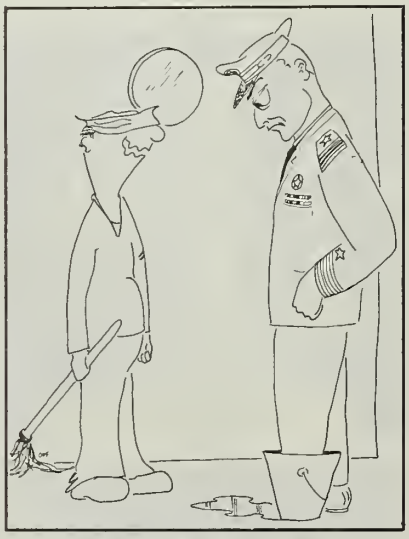
Jamaica Run (2475): Adventure Drama; Ray Milland, Arlene Dahl (Re-Issue).

Taxi (2476): Melodrama; Dan Dailey, Constance Smith (Re-Issue).

Vicki (2477): Drama; Richard Boone, Elliot Reid (Re-Issue).

Beach Party (2478) (C) (WS):

All-Navy Cartoon Contest
Robert J. Freemyer, AG3, USN



"Sure sorry about that, chief."

Comedy; Frankie Avalon, Annette Funicello.

Twilight of Honor (2479) (WS): Drama; Richard Chamberlain, Joey Heatherton.

Cry of Battle (2480): Drama; Van Heflin, Rita Moreno.

Summer Magic (2481) (C): Drama; Hayley Mills, Burl Ives.

The Eagle and the Hawk (2482): Drama; John Payne, Rhonda Fleming (Re-Issue).

Somebody Loves Me (2483): Comedy; Betty Hutton, Ralph Meeker (Re-Issue).

Road to Morocco (2484): Comedy; Bing Crosby, Bob Hope (Re-Issue).

Dear Wife (2485): Melodrama; William Holden, Joan Caulfield (Re-Issue).

Irma LaDouce (2486) (C) (WS): Comedy; Shirley McLaine, Jack Lemmon.

Thunder Island (2487) (WS): Melodrama; Gene Nelson, Fay Spain.

The Crawling Hand (2488): Suspense Drama; Peter Breck, Kent Taylor.

Hootenanny Hoot (2489): Musical; Peter Breck, Ruta Lee.

Arrowhead (2490): Action Drama; Charlton Heston, Katy Jurado (Re-Issue).

Hurricane Smith (2491): Drama; Yvonne de Carlo, John Ireland (Re-Issue).

This Gun For Hire (2492): Drama; Veronica Lake, Robert Preston (Re-Issue).

The Turning Point (2493): Drama; William Holden, Alexis Smith (Re-Issue).

Gidget Goes to Rome (2494) (C): Comedy; Cindy Carol, James Darren.

Of Love and Desire (2495) (C): Drama; Merle Oberon, Steve Cochran.

The Terror (2496) (C): Melodrama; Boris Karloff, Sandra Knight.

Fun in Acapulco (2497) (C): Musical; Elvis Presley, Ursula Andress.

Unconquered (2498): Action Drama; Gary Cooper, Paulette Goddard (Re-Issue).

Riding High (2499): Comedy Drama; Bing Crosby, Coleen Gray (Re-Issue).

The Great Houdini (2500): Biography; Tony Curtis, Janet Leigh (Re-Issue).

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"That reminds me, did I tell you what the chief said when I asked for special liberty the other day?"

Forever Female (2501): Comedy; William Holden, Ginger Rogers (Re-Issue).

The Haunted Palace (2502) (C) (WS): Melodrama; Vincent Price, Debra Paget.

The Siege of the Saxons (2503) (C): Drama; Janette Scott, Ronald Lewis.

Journey to Nowhere (2504): Melodrama; Tony Wright, Sonia Zieman.

Mary, Mary (2505) (C): Comedy; Debbie Reynolds, Barry Nelson.

Mr. Music (2506): Musical; Bing Crosby, Nancy Olson (Re-Issue).

Those Redheads from Seattle (2507): Melodrama; Rhonda Fleming, Gene Barry (Re-Issue).

Hong Kong (2508): Drama; Rhonda Fleming, Ronald Reagan (Re-Issue).

Fancy Pants (2509): Comedy; Bob Hope, Lucille Ball (Re-Issue).

The Wheeler Dealers (2510) (C) (WS): Melodrama; James Garner, Lee Remick.

Hercules and the Captive Women (2511) (C) (WS): Melodrama; Reg Park, Fay Spain.

Paris Pick Up (2512): Drama; Robert Hassein, Lea Massari.

Golden Age of Comedy (2513): Comedy; Ben Turpin, Jean Marlow.

O. S. S. (2514): Drama; Alan Ladd, Geraldine Fitzgerald (Re-Issue).

The Last Outpost (2515): Melodrama; Ronald Reagan, Rhonda Fleming (Re-Issue).

My Favorite Blond (2516): Comedy; Bob Hope, Madeleine Carroll (Re-Issue).

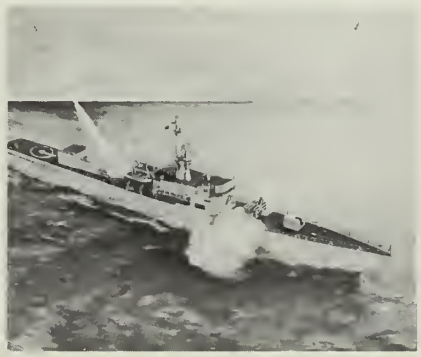
The Gallant Blade (2517): Drama; Larry Parks, Marguerite Chapman (Re-Issue).

WHAT'S IN A NAME

AGDE—Experimental Ocean Escort

An experimental ship designed to develop and test equipment and tactics for ASW surface units has been assigned the name Glover. The new ship, an experimental ocean escort (AGDE 1), is the first of her type ever authorized for construction. She is being built at Bath, Maine.

Advances in ASW surface ship weapons, equipment and tactics are expected to be the result of development tests carried out by Glover when she's ready for commissioned service, probably in late 1965.



She will be fitted initially with the latest long-range sonar and ASW weapons. Other weapons, and equipment such as advanced propulsion systems, may be installed at later dates for testing.

The AGDE 1 will more or less resemble a guided missile escort ship (DEG).

She is named in honor of General John Glover (1732-1797), who led General George Washington's troops across the Delaware River for their attack on Trenton, N. J.

General Glover was a leading member of the Revolutionary movement who developed an interest in military affairs. He recruited a militia unit that became known as the "amphibious regiment." His troops defended the ports of Beverly and Marblehead and helped in the evacuation of Washington's troops from Long Island before their advances on Trenton.

Eligibility Rules for Armed Forces Expeditionary Ribbon

"I have noticed some officers and enlisted personnel wearing the Armed Forces Expeditionary ribbon," writes Yeoman 2nd Class P.L.A. "To my knowledge, however, the Secretary of the Navy has never published a list of units with dates of eligibility for the Lebanon operation in 1958.

"Can commanding officers authorize the wearing of this ribbon on the basis of a man's service record?"

THANKS FOR GIVING us a way to introduce this somewhat lengthy list of ships and naval units which are eligible for the award. Official information concerning eligibility for the AFE medal for the Lebanon operations was recently announced. Lists for the other authorized expeditions such as Cuba, Quemoy, and the Congo are not yet completed.

Navymen who served with the ships and units between the dates listed here are authorized to wear the AEF ribbon. The medal itself is not yet ready for distribution. When it is, word will be passed.

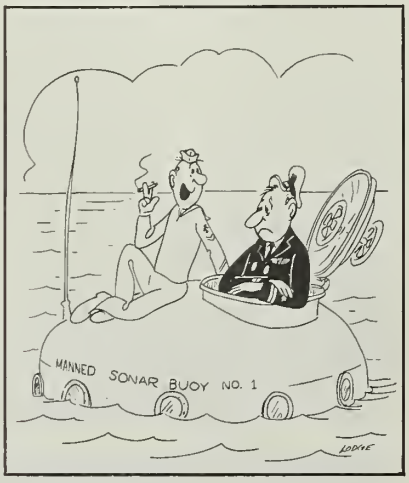
Commanding officers can authorize the wearing of the ribbon if they have the proper records on board.

Ships and units whose crews are eligible for the award and the dates during which eligibility can be established are given below. Eligibility criteria are also given.

SHIPS AND DATES OF ELIGIBILITY IN 1958

Abbot (DD 629)—20 August-22 September
Adroit (MSO 509)—15 August-4 September
Aggressive (MSO 422)—15-23 August; 2-9 September
Alcor (AK 259)—11-12 August; 21-26 August
Aldeboron (AF 10)—9-17 August
Antores (AK 258)—6-7 October
Atokopa (ATF 149)—29-30 August
Aucillo (AO 56)—22-23 August; 2-4 September
Borry (DD 933)—17-25 July; 29 July-1 August; 11-20 August; 27-31 August
Bosilone (DD 824)—26 July-11 August
Generol R. M. Blotchford (T-AP 153)—13-17 October
Cambrio (APA 36)—29 September-18 October
Copricornus (AKA 57)—13-24 July; 5-23 August; 16 September-1 October
Chewoucon (AOG 50)—22 October
Chilton (APA 38)—17-23 July; 7-22 August; 5 September-1 October; 16-25 October
Chukawan (AO 100)—29 August-12 September
Cone (DD 866)—17 July-2 August; 11-21 August; 2-7 September
Cromwell (DE 1014)—26-31 July; 11-22 August; 31 August-14 September
Domoto (DD 871)—1-9 August
Deoley (DE 1006)—26-31 July; 11-22 August; 31 August-14 September
Denebolo (AF 56)—19-28 September
Des Moines (CA 134)—17 July-10 August; 23-29 August
Generol Leroy Eltinge (T-AP 154)—3-5 October; 23-24 October
Essex (CVA 9)—16 July-1 August; 11-20 August
Fidelity (MSO 443)—15-23 August; 2-9 September
Fort Snelling (LSD 30)—17-23 July; 7-22 August; 5 September-1 October; 16-25 October
Fremont (APA 44)—18 July-6 August; 23 August-6 September; 14-16 September
Geiger (T-AP 197)—5 August
Hoiley (DD 556)—17 July-21 August; 4-6 September
Hortley (DE 1029)—1-11 August; 22-31 August; 16-17 September
Hyades (AF 28)—29-30 August; 5-9 September
LCU 1466—15 July-3 October; 16-25 October
LCU 1469—17-21 July; 5-23 August; 16-30 September
LCU 1474—29 September-18 October
LCU 1486—29 September-18 October
LCU 1491—17 July-16 September
LCU 1492—18-31 July; 1-6 August; 23-31 August; 1-7 September; 14-16 September
LCU 1608—15 July-3 October; 16-25 October
LCU 1609—29 September-18 October
Leory (DDR 879)—1-10 August; 19-31 August
Lester (DE 1022)—30 July-11 August; 22-31 August; 16-17 September
Morios (AO 57)—10 August-2 September
Mattobesset (AOG 52)—22-25 July; 14-16 August; 23-27 September; 13 October
McGowon (DD 678)—15 July-1 August; 11-20 August; 2-7 September
McNoir (DD 679)—15 July-1 August; 11-20 August; 31 August-12 September
Mercury (AKS 20)—22-25 August; 4-9 September; 23-26 September
Meredith (DD 890)—31 August-7 September
Miller (DD 535)—17 July-21 August; 4-6 September
Monrovio (APA 31)—14-24 July; 5-22 August; 16 September-1 October
Mount McKinley (AGC 7)—18-31 July
Muliphen (AKA 61)—18 July-6 August; 23 August-6 September; 14-16 September
New (DD 818)—17 July-1 August; 11 August
Newport News (CA 148)—21-27 September
Nimble (MSO 459)—17 July-15 August; 9 September-2 October
Oglethorpe (AKA 100)—29 September-18 October
Olmstead (APA 188)—18 July-6 August; 23-30 August; 15-16 September
Pinnocle (MSO 462)—17 July-2 August; 21 August-2 October
Plymouth Rock (LSD 29)—17-21 July; 5-23 August; 16-30 September
Pocono (AGC 16)—17 July-25 October
Power (DD 839)—21-24 September
Gen. George M. Randall (AP 115)—2-3 August
Rich (DD 820)—17 July-11 August
Rigel (AF 58)—15 October
Charles H. Roan (DD 853)—20-26 August
Samuel B. Roberts (DD 823)—20-24 August; 2-10 September
Rockbridge (APA 228)—16-23 July; 7-22 August; 5 September-1 October; 16-25 October
Rooks (DD 804)—17-25 July; 11-14 August
Forrest B. Royal (DD 872)—20-26 August
Sogacity (MSO 469)—17 July-2 August; 21 August-2 October
San Marcos (LSD 25) — 29 September-18 October
Saratoga (CVA 60)—17-25 July; 29 July-11 August; 19 August-7 September
Severn (AO 61)—25-29 July; 10-27 August
Shasta (AE 6) — 22 July-11 August; 20 August-1 September
Shenandoah (AD 26)—22-24 July
Skill (MSO 471)—17 July-15 August; 9 September-2 October
Spiegel Grove (LSD 32)—18 July-6 August; 23 August-7 September; 14-16 September
Stalwart (MSO 493)—15 August-2 September
Steinaker (DDR 863)—17-25 July; 30 July-16 August; 31 August-14 September
Stribling (DD 867)—17-23 July
Suffolk County (LST 1173)—29 September-18 October
Taconic (AGC 17)—14 July-8 October
Joseph K. Taussig (DE 1030)—17 July-10 August; 22-31 August
The Sullivans (DD 537)—14 July-1 August; 15-20 August; 27 August-7 September

All-Navy Cartoon Contest
LCDR Billups E. Lodge, USN



"Congratulations on your new command!"

Traverse County (LST 1160)—14-24 July; S-23 August; 16 September-1 October
Upshur (T-AP 198)—1-3 August
Van Vaarhis (DE 1028)—17 July-11 August; 22-31 August; 16-17 September
Vermilion (AKA 107) — 16-23 July; 9-22 August; S September-1 October; 16-25 October
Vesole (DDR 878)—17 July-1 August; 11-20 August; 16-17 September
Waccomow (AO 109)—26 July-11 August; S-8 September; 19-23 September
Wodleigh (DD 689) — 14-24 July; 6-11 August; 19 August-7 September
Walworth County (LST 1164)—14-24 July; S-23 August; 16 September-1 October
Wasp (CVS 18)—16 July-11 August; 21-31 August; 16-17 September
John Willis (DE 1027)—16-26 July; 11-21 August; 31 August-16 September
Robert L. Wilsan (DD 847) — 17 July-11 August
William M. Wood (DDR 715)—19-23 July; 28 July-4 August; 16 August-3 September
Wrangell (AE 12)—16-25 July; 30-31 July; 15-22 August; 2-11 September
York County (LST 1175)—29 September-18 October

NAVY UNITS AND DATES OF ELIGIBILITY

ALUSNA BEIRUT—1 July-1 November
CINCSPECOMME—16 July-23 October
COMCARDIV SIX—17-25 July; 29 July-11 August; 19 August-7 September
COMCARDIV FOURTEEN — 16 July-11 August; 21-31 August; 16-17 September
COMCORTRON TEN — 26-31 July; 11-22 August; 31 August-14 September
COMCORTRON FOURTEEN — 17 July-11 August; 22-31 August; 16-17 September
COMCRULANT—21-27 September
COMDESDIV 61—17 July-2 August; 11-21 August; 2-7 September
COMDESDIV 62—17-25 July; 30 July-16 August; 31 August-14 September
COMDESDIV 102—20 August-22 September
COMDESDIV 201 — 17-25 July; 29 July-1 August; 11-20 August; 27-31 August
COMDESDIV 202 — 14-24 July; 28 July-1 August; 11-20 August; 2-7 September
COMDESDIV 361—17 July-11 August
COMDESDIV 362—17 July-11 August
COMINDIV 44—15 August-4 September
COMINDIV 84—17 July-15 August; 9 September-2 October
COMPHIBGRU 4—17 July-3 October
COMSIXTHFLT—17 July-10 August; 23-29 August
COMSTSMEDSUB-AREA REP BEIRUT — 30 July-25 October
COMTRANSPHIBRON 2—17-23 July; 9-22 August; S September-1 October; 16-25 October
COMTRANSPHIBRON 4 — 18-31 July; 23 August-6 September; 14-16 September
COMTRANSPHIBRON 6 — 14-24 July; S-22 August; 16 September-1 October
COMTRANSPHIBRON 8 — 29 September-18 October

Navymen who were not serving with one of the above ships or units during the dates listed may otherwise be eligible if they meet one or more of the criteria listed in the following paragraphs.

• Participated for 30 or more consecutive days in the area of operations.

• Were engaged in direct support of the operation for 30 consecutive days or 60 non-consecutive days, provided this support involved entering the area of operations.

• Served for the full period when an operation was of less than 30 days' duration.

• Were engaged in actual combat or duty which was equally as hazardous as combat duty, during the operation with armed opposition, regardless of the length of time served in the area.

• Participated as a regularly assigned crew member of an aircraft flying into, out of, within or over the area in support of the military operation.

• Were recommended, or attached to a unit recommended by the Chief of Naval Operations or a commander of a unified or specified command for award of the medal, although the criteria above were not fulfilled.

Complete information on the Armed Forces Expeditionary Medal was published in SecNav Inst. 1650.19A. The list of ships and units eligible for the medal was in SecNav Notice 1650 of 11 Oct 1963.

New Documentary Films Will Give You Fresh Slant on Navy Life

Recent releases of documentary films available to naval commands contain some new listings of general interest to Navymen. Here they are with their identification symbols and a brief description of each:

• *Leadership Speaks* – Division CPOs' Views on Leadership (KN-9698O) (16 min-B & W).

Division CPOs give their views on leadership and discuss the necessity for leadership in getting the job accomplished.

• *Leadership Speaks* – Division POs' Views on Leadership (KN-9698P) (16 min-B & W).

Division POs express their views on leadership and the leadership methods they use in accomplishing assigned tasks.

• *The CIC Story* (MN-9699) (27 min-B & W).

The relationship of the Combat Information Center to Fleet operations as revealed through the training of CIC specialists at Glynco, Ga. Workings of CIC aboard surface ships, submarines and aircraft are shown in mock-ups that realistically duplicate actual installations in the Fleet.

• *Polaris Submarine—Journal of an Undersea Voyage* (MC-9925) (55 min-color).

Martin Agronsky chronicles a patrol in the *Polaris* submarine USS *George Washington* which includes scenes at Holy Loch, Scotland, and a missile firing.

• *Story of a Carrier Pilot* (MC-9934) (28 min-B & W).

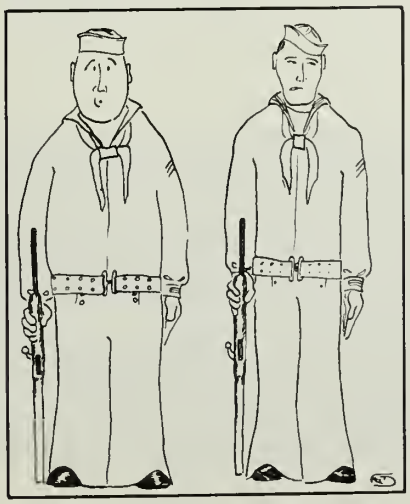
This film follows a young naval aviator through qualification in *F4B Phantoms* ending with carrier qualification with his squadron aboard USS *Ranger*.

• *Biography of Admiral Nimitz* (MC-9937) (28 min-B & W).

A documentary on the life of Fleet Admiral Chester W. Nimitz which includes dramatic action footage from World War II.

All these films are unclassified and have sound. They can be obtained from Navy and Marine Corps film libraries and are held by major commands. Others will be listed later.

All-Navy Cartoon Contest
Frederic W. Donaur, Jr., PC3, USN



"Pssst—Look busy, here comes the OOD."

Ney Award Rules Changed for Ashore and Afloat Messes

Enlisted messes competing for the Ney Memorial Awards this year will observe different rules. The new rules represent the first major change in the program since the All-Navy food service competition began seven years ago.

This year, two Ney contest award plaques will be presented to the outstanding messes afloat rather than one. A new class has been established for messes feeding not more than 300 men. Competitors in this class will be eligible for the title of Best Small Mess Afloat.

Messes feeding more than 300 men will compete for the honor of being the Best Large Mess Afloat.

The change was made to provide a more equitable basis for judging, since the size of the messes judged ranges from those on board a minesweeper feeding 30 or 40 men to the mess of an aircraft carrier which feeds approximately 4000 men.

The rules for judging the outstanding shore mess remain unchanged.

Another change in the 1964 rules affects the general messes chosen as outstanding in their respective type commands or naval district. An officer representing the Ney Award Evaluation Committee will make a one-day inspection of the nominated mess during the month of April. His evaluation of the mess will be considered by the Ney Committee when it meets in Washington, D. C., in May 1964.

The entire committee will visit the nine messes selected as finalists and three of the nearly 1200 general enlisted men's messes throughout the world which competed will be named as outstanding messes ashore and afloat.

The Ney Memorial Award commemorates the late CAPT Edward F. Ney, SC, USN, who directed the subsistence division of the Bureau of Supplies and Accounts during World War II.

• 22 RATINGS OPEN TO WAVES

— Although the CT rating has been deleted from the list of Navy job fields in which enlisted women may serve, two relatively new ratings are included in the 22 ratings open to them.

Because of a substantial decrease in billets and duty stations available to Wave CT's enlisted women will no longer serve as communications technicians. As a result:

- Women now serving in the CT rating must request a change to any other rating approved for Waves. There are now 22 such ratings, including the relatively new DS (data systems technician) and AZ (aviation administrationman). The deadline for submitting requests (to the Chief of Naval Personnel, Pers B223) is 1 Mar 1964.
- Since there is a strong background similarity between CT and yeoman, Wave CTs are encouraged to switch to YN.

As an exception, those with 18 or more years' active service may request to remain in the CT rating in order to complete 20 years before transferring to the Fleet Reserve.

Details on these and other points concerning the deletion of CT from the Wave rating list are in BuPers Notice 1440 (dated 6 Nov 1963).

School Bells Ring on *Norris*; Program Proves Big Success

A lively and successful program aimed at providing non-high school graduates with that much-prized diploma has been introduced by USS *Norris* (DD 859). The program places heavy reliance on two U. S. Armed Forces Institute products—General Educational Development (GED) tests and correspondence courses—plus an Education Officer who takes his job seriously and who has the support of his commanding officer.

Each enlisted man who reports on board for duty is interviewed by the Education and Training Officer, Ensign C. Bruce Johnstone, USNR, an honors graduate of Harvard. If the new man has not graduated from high school, Ensign Johnstone firmly suggests a program of study designed to fill the gaps and strengthen weaknesses.

When the EM has completed the suggested course of study, Ensign Johnstone orders the GED tests. There are five of these tests, all administered by the USAFI Test Control Officer who, on board *Norris*, just happens, in this case, to be ENS Johnstone.

When all the tests have been completed they are returned with the answer sheets to USAFI where they are scored. The results are then forwarded to the commanding officer. If the man has received acceptable grades, ENS Johnstone helps him apply for a high school diploma or equivalency certificate.

As a result of this program, 36 men, or about 80 per cent of the non-high school graduates who reported on board *Norris* during 1963,



TAKE ADVANTAGE of the first opportunity to pass on ALL HANDS, so that nine others have a chance to read it.

ANSWERS TO QUIZ AWEIGH

Quiz Aweigh may be faund an page 31.

1. (a) Magnifying glass on a campass.
2. (b) Cammissaryman in charge af a pravisian issue raam.
3. (b) Physical drill.
4. (c) A steel helmet warn during drills and exercises.
5. (b) Murder board.
6. (b) First aid kit far use in a baat.

now possess high school graduation certificates.

In spite of a heavy operating schedule, this program has been carried on without undue conflict in the ship's professional training program. As evidence, *Norris* can (and does, frequently) point to her four Battle Efficiency "Es" won during the last five years.

Exam Tearsheets Will Help Guide You in Your Studies

If you're scheduled to take the advancement exams this month, you've probably already received the tear-off sheet from the exam center, which tells you what to study for the forthcoming test.

The tear sheet lists qualifications and bibliography for the advancement in rating examinations. It is the latest effort by the exam center to keep you up to date on your rating.

The Naval Examining Center has also devised new answer cards for use in the service-wide examinations. The new cards are basically the same as the ones used last year, except that there are spaces for your rate code, performance marks and awards credit. You will copy this information onto your card from a NavPers 624W worksheet prepared before the test by your personnel office.

You should have an opportunity to check your 624W prior to the test, usually at the same time you sign a NavPers 624 card. The card, containing the same information as does the worksheet, is sent to the Naval Examining Center before test time.

The new test cards are the first step in the elimination of the NavPers 624 card. In the future the Examining Center will take the required information directly from your answer card.

After you have completed the test, your command will doublecheck your answer cards to insure that you have entered the correct information from the worksheet.

Officers Get the Word

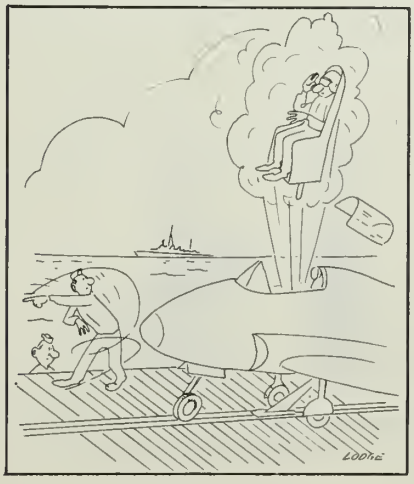
You don't have to know the language, according to a popular song of several years ago, but the officers on board uss *Springfield* (CLG 7) decided it might help if they did. With that in mind, 32 of them began studying French, Spanish and Italian at Brooklyn's Reserve Officer Training Center while their ship was in drydock last summer.

Springfield is permanently stationed in the Mediterranean and her commanding officer, CAPT Russell S. Crenshaw, USN, made arrangements with the Defense Language Institute for training his officers in several Mediterranean languages to make them better goodwill ambassadors in the Navy's People-to-People program.

The Institute obliged and furnished three teachers from New York City universities who gave *Springfield's* officers 120 hours of language instruction. The officers were expected to match each hour of class work with an hour of home study and emphasis was placed on conversation.

With this background, it can safely be assumed that, as far as the officers on board uss *Springfield* are concerned, *essi parlano Italiano; ellos hablan Espanol* and *ils parlant Francais.*

All-Navy Cartoon Contest
LCDR B. E. Lodge, USN



DIRECTIVES IN BRIEF

This listing is intended to serve only for generol informotion ond os on index of current Alnovs os well os current BuPers Instructions ond BuPers Notices thot opply to most ships ond stotions. Mony instructions ond notices ore not of generol interest ond hence will not be corried in this section. Since BuPers Notices ore orronged occording to their group number ond hove no consecutive number within the group, their dote of issue is included olso for identificotion purposes. Personnel interested in specific directives should consult Alnovs, Instructions ond Notices for complete detoils before toking oction.

Alnavs

No. 51—Directs every member of the Department of the Navy to exert every effort to improve his own efficiency and that of his unit in compliance with the President's request for greater thrift and frugality in the government.

No. 52—Extends New Year greetings to all members of the U. S. Navy and Marine Corps from the Chief of Naval Operations.

Instructions

No. 5510.3H—Describes requirements and procedures for security clearance of personnel ordered to duty under instruction in schools and courses requiring access to classified material.

SecNav 7220.48 — Designates courses of instruction used to prepare for assignment to a submarine of advanced design or a position of increased responsibility and for which submarine pay is authorized for personnel designated "Qualified in submarines."

Notices

No. 1418 (27 November)—Announced the schedule for Navy-wide examinations for enlisted personnel to be held in February and called attention to pertinent information regarding advancements in rating.

No. 1520 (27 November) — Solicited officer applicants for the submarine school classes.

No. 1520 (27 November) — Invited applications from Supply Corps officers for assignment to the Subsistence Technology Course at Fort Lee, Va., and the Transportation Management Course at the Naval Supply Center, Oakland, Calif., for the summer 1964 and January 1965 sessions.

No. 1520 (12 December) — Announced the selection of officers for postgraduate and undergraduate educational programs.

Here Are Locations of Branches of the Navy Relief Society

Navymen or Navy dependents who want to ask for help can go to one of the following Navy Relief Auxiliaries or they can write to the Navy Relief Society's Headquarters in Washington, D. C. For a report on this organization, see page 2.

Auxiliaries are located at:

Alaska: Headquarters, 17th Naval District, Kodiak, Alaska.
Branch: U. S. Naval Station, Adak, Alaska.

Albany: U. S. Marine Corps Supply Center, Albany, Ga.

Bainbridge: U. S. Naval Training Center, Bainbridge, Md.

Balboa: Headquarters, Commandant, 15th Naval District, Fort Amador, Canal Zone.

Bermuda: U. S. Naval Station, Bermuda.

Camp Lejeune: Building 41, Camp Lejeune, N. C.

Camp Pendleton: Building 1121, U.S. Marine Corps Base, Camp Pendleton, Calif.
Branch: U. S. Marine Corps Training Center, Twenty-Nine Palms, Calif.
Branch: U. S. Marine Corps Mountain Warfare Training Center, Bridgeport, Calif.

Cherry Point: U. S. Marine Corps Air Station, Cherry Point, N. C.

Connecticut: U. S. Naval Submarine Base New London, Groton, Conn.

Dallas: U. S. Naval Air Station, Dallas, Texas.

District of Columbia: Navy Yard Annex, U. S. Naval Station, Washington 25, D. C.
Branch: U. S. Naval Radio Station, Cheltenham, Md.
Branch: U. S. Naval Air Station, Patuxent River, Md.
Branch: U. S. Naval Proving Grounds, Dahlgren, Va.

East San Francisco Bay: U. S. Naval Air Station, Alameda, Calif.
Branch: U. S. Naval Hospital, Oakland, Calif.
Branch: U. S. Naval Air Station, Oakland, Calif.
Branch: U. S. Naval Supply Center, Oakland, Calif.
Branch: U. S. Naval Air Station, Fallon, Nev.

El Toro: U. S. Marine Corps Air Station, El Toro, Santa Ana, Calif.
Branch: U. S. Marine Corps Air Station, Yuma, Ariz.

Great Lakes: U. S. Naval Training Center, Great Lakes, Ill.
Branch: U. S. Naval Air Station, Olathe, Kans.
Branch: U. S. Naval Air Station, Glenview, Ill.
Branch: U. S. Naval Air Station, Grosse Ile, Mich.

Guantanamo Bay: U. S. Naval Operating Base, Guantanamo Bay, Cuba.

Hampton Roads: Building AN-67, U. S. Naval Base, Norfolk 11, Va.
Branch: U. S. Naval Amphibious Base, Little Creek, Va.
Branch: U. S. Naval Hospital, Portsmouth, Va.
Branch: U. S. Naval Shipyard, Portsmouth, Va.
Branch: U. S. Naval Weapons Station, Yorktown, Va.
Branch: U. S. Naval Air Station, Oceana, Va.

Hawaii: Headquarters, Commandant, 14th Naval District, Pearl Harbor, Hawaii.
Branch: U. S. Naval Air Station, Barbers Point, Oahu, Hawaii.
Branch: U. S. Marine Corps Air Station, Kaneohe Bay, Oahu, Hawaii.

Jacksonville: U. S. Naval Air Station, Box 48, Jacksonville 12, Fla.
Branch: U. S. Naval Air Station, Cecil Field, Fla.
Branch: U. S. Naval Air Technical Training Unit, Jacksonville, Fla.
Branch: U. S. Naval Air Station, Sanford, Fla.
Branch: U. S. Naval Air Station, Glynco, Brunswick, Ga.

Japan: Commander Naval Forces, Japan, c/o FPO, San Francisco, Calif.

Key West: U. S. Naval Base, Key West, Fla.

Lemoore: U. S. Naval Air Station, Lemoore, Calif.

London: Commander, U. S. Naval Activities, London, England.

Long Beach: Building 111, U. S. Naval Station, Long Beach 2, Calif.
Branch: U. S. Naval Ordnance Test Station, China Lake, Calif.
Branch: U. S. Naval Construction Battalion Center, Port Hueneme, Calif.
Branch: U. S. Naval Administrative Unit, Lake Mead Base, Las Vegas, Nev.
Branch: U. S. Naval Air Station, Point Mugu, Calif.
Branch: U. S. Marine Corps Supply Center, Barstow, Calif.

Mare Island: U. S. Naval Shipyard, Mare Island, Calif.
Branch: Naval Ammunition Depot, Concord, Calif.

Marianas: Post Office Box 3, Commander Naval Forces, Marianas, c/o FPO San Francisco, Calif.

Massachusetts: Navy Building, 495 Summer St., Boston 10, Mass.

Mayport: U. S. Naval Station, Mayport, Fla.

Memphis: U. S. Naval Air Station, Memphis 15, Tenn.

Miramar: U. S. Naval Air Station, Miramar 45, Calif.

Naval Academy: U. S. Naval Academy, Annapolis, Md.

New Hampshire: U. S. Naval Shipyard, Portsmouth, N. H.

New Jersey: U. S. Naval Air Station, Lakehurst, N. J.

New Orleans: Building 129, U. S. Naval Station, New Orleans 40, La.

New York: U. S. Naval Shipyard, Building 312, Flushing and Washington Avenues, Brooklyn 1, N. Y.
Branch: Naval Supply Corps Depot, Bayonne, N. J.
Branch: U. S. Naval Hospital, St. Albans, N. Y.

Okinawa: Okinawa Auxiliary, Navy Relief Society, Third Marine Division (Reinf) FMF, c/o FPO, San Francisco, Calif.

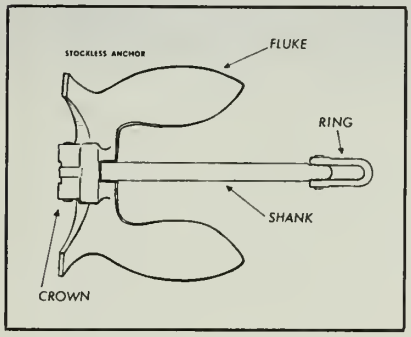
Parris Island: U. S. Marine Corps Recruit Depot, Parris Island, S. C.

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"Hey, Dad! How about lending a hand with the bags, huh?"

Grains of Salt—



Branch: Marine Corps Auxiliary Air Station, Beaufort, S. C.

Pennsylvania: U. S. Naval Base, Philadelphia 12, Pa.

Pensacola: U. S. Naval Air Station, Pensacola, Fla.
Branch: U. S. Navy Mine Defense Laboratory, Panama City, Fla.
Branch: Naval Auxiliary Air Station, Whiting Field, Milton, Fla.
Branch: Naval Air Station Atlanta, Marietta, Ga.
Branch: Naval Auxiliary Air Station Saufley Field, Pensacola, Fla.

Philippines: U. S. Naval Station Sangley Point, Luzon, P. I.
Branch: U. S. Naval Station Subic Bay, P. I.

Puerto Rico: Headquarters, 10th Naval District, San Juan, Puerto Rico.
Branch: U. S. Naval Base, Roosevelt Roads, Puerto Rico.
Branch: Grand Turk Island, The West Indies.

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"No, Sir, I didn't get his name . . . Forgot to get his number . . . But he sounded pretty important and said if you wanted to keep all of your stripes you had better call back right away."

Puget Sound: Building 433, Puget Sound Naval Shipyard, Bremerton, Wash.

Quantico: U. S. Marine Corps Schools, Quantico, Va.

Quonset Point: U. S. Naval Air Station, Quonset Point, R. I.
Branch: U. S. Naval Operating Base, Argentia, Newfoundland.
Branch: U. S. Naval Air Station, Brunswick, Maine.

Rhode Island: U. S. Naval Base, Newport, R. I.

San Diego: U. S. Naval Station, Building 157, San Diego 36, Calif.
Branch: U. S. Naval Station, San Diego, Calif.
Branch: U. S. Naval Air Station, San Diego, Calif.
Branch: U. S. Naval Training Center, San Diego, Calif.
Branch: U. S. Marine Corps Recruit Depot, San Diego, Calif.
Branch: U. S. Naval Auxiliary Air Station, El Centro, Calif.

San Francisco: Headquarters, 12th Naval District, P. O. Box 948, San Francisco, Calif.
Branch: U. S. Naval Air Station, Moffett Field, Calif.
Branch: U. S. Naval Station, Treasure Island, Calif.
Branch: U. S. Naval Postgraduate School, Monterey, Calif.
Branch: San Francisco Naval Shipyard, San Francisco, Calif.

Seattle: Naval Supply Depot, Building 57, Seattle 99, Wash.
Branch: U. S. Navy Nuclear Power Training Unit, Idaho Falls, Idaho.
Branch: U. S. Naval Air Station, Whidbey Island, Oak Harbor, Wash.

Sigonella: Naval Air Facility, Sigonella, Sicily.

South Carolina: U. S. Naval Base, Charleston, S. C.
Branch: U. S. Navy Supply Corps School, Athens, Ga.

Texas: U. S. Naval Air Station, Corpus Christi, Tex.
Branch: U. S. Naval Auxiliary Air Station, New Iberia, La.
Branch: U. S. Naval Auxiliary Air Station, Kingsville, Tex.
Branch: U. S. Naval Auxiliary Air Station, Chase Field, Beeville, Tex.

Trinidad: U. S. Naval Station, Trinidad, The West Indies.

HERE'S YOUR NAVY

Navymen have long been accustomed to learning about their environment through sensing devices with capabilities far beyond the realm of a man's sight or, for that matter, any of his other senses.

Infrared radiation, for example, is one of the most useful of such phenomena. Invisible to man, it can only be sensed by him in large amounts at close range. The Navy takes advantage of this part of the spectrum in its use of remote sensing devices which can measure properties of an object without actually coming in contact with it.



In this way, geographers, oceanographers and other scientists have been using air and ground photography for years to measure an object's properties, to map extensive areas and monitor conditions that change with time.

With the right kind of sensing technique, scientists are able to use high-flying aircraft or satellites—to gather entirely new kinds of information, some of which couldn't be acquired by any amount of labor with ground-based instruments.

A few of the places these techniques have been used are in reconnaissance and analysis of sea ice, mapping ocean currents, studying snow surfaces and ice cap phenomena and developing theories pertaining to crevasse detection.

Infrared radiation, of course, isn't the only way in which the Navy sees from afar. It also uses ultraviolet radiation, gamma rays and microwaves, each of which can be exploited with the right kind of instruments and which give the picture the Navy wants.



The Navy constantly seeks to improve its long-range perception so it can better utilize its environment and make its operations safer and more effective.

DECORATIONS & CITATIONS



LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ PARKER, Edward N., VADM, USN, for service as the first Deputy Director, Strategic Target Planning, from August 1960 to January 1962, and as the first Assistant Director for the Weapons Evaluation and Control Bureau, United States Arms Control and Disarmament Agency, from January 1962 to November 1963. As Deputy Director, Strategic Target Planning, VADM Parker exercised outstanding professional skill and diplomacy in carrying out his responsibilities, ensuring the most effective organization and development of the Joint Strategic Target Planning Staff. Under his inspired leadership, with little or no precedent available for guidance, the most sensitive national strategic plans were successfully evolved.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ BAKER, Richard L., LT, USN, for heroic service during the period 6 to 9 May 1963, in connection with the treatment of a commercial diver who was suffering from an extremely severe case of caisson disease. As Officer in Charge, USS *Cero* (AGSS 225), LT Baker, after being notified that the patient was en route to *Cero*, conferred briefly with a medical doctor diagnosing the case, and made the decision to attempt treatment by pressurizing the forward battery of the submarine. Fully aware of the possibility of sudden death from explosive decompression, in the event of failure of bulkhead packing glands, LT Baker entered the compartment to be medical tender for the victim throughout the entire treatment, which required a total time of approximately 56 hours.

★ FELDMAN, Ronald W., BM3, USN, for heroism on the nights of 28 Feb and 2 Mar 1962, while serving on board USS *Manley* (DD 940), which was then engaged in rescue destroyer operations for USS *Independence* (CVA 62) off the east coast of the United States. On two separate occasions within 48 hours, Feldman unhesitatingly entered treacherous waters to assist in the rescue of injured, downed aviators. Both rescues were effected during complete darkness in heavy seas and high winds. The rescue of 2 Mar 1962 was further complicated by a below-freezing air temperature and a sea temperature of 40 degrees. After Feldman had assisted in bringing the injured aviator aboard, he himself had to be helped aboard, where his frozen clothing was cut away from his body.

★ OWENS, James R., GM3, USN
★ HOOVER, Harry G., FT3, USN

For heroic conduct on 29 Aug 1962 during a visit of their ship, USS *Middlesex County* (LST 983), to Puntarenas, Costa Rica. Observing an excited crowd of people a short distance from where they were swimming at a local beach, Owens and Hoover immediately raced to the scene and sighted a man floundering in the treacherous surf about 120 yards from the shore. Although the crowd warned them of the strong possibility of sharks, they entered the water, swam to the struggling victim, and succeeded in bringing him back through the dangerous undertow to the safety of the beach.

★ STOKES, John R., Jr., EN2, USN, for heroism on the morning of 6 Jun 1963 while serving as Petty Officer of the watch in the forward engine room on board USS *Vital* (MSO 474), operating in the Gulf of Mexico. When a severe fire broke out in the forward engine room, Stokes, although deprived of water to combat the fire because of a simultaneous loss of firemain pressure, immediately utilized an installed carbon dioxide system to hold back the flames in order to permit other men in his watch section to secure power and to secure a generator in the area. Only when at the point of exhaustion, and after all other personnel were clear of the engine room, did he evacuate his station.

★ THOMANN, Ronald J., PT1, USN, for heroic conduct on the night of 20 Sep 1963 in connection with an attack by an unknown assailant on an elderly male pedestrian in Washington, D. C. While attempting to overtake an elderly friend in order to accompany him home, Thomann witnessed an attack on the older man by an assailant who knocked the victim to the ground. Rushing across the street through heavy traffic to the defense of his friend, Thomann was about to grapple with the attacker when the latter shot him, wounding him seriously, and fled from the scene. In rescuing another at the risk of his own life, Thomann displayed outstanding courage, determination, and selflessness, in keeping with the highest traditions of the U. S. Naval Service.

★ WALLACE, Harold D., EM2, USN, for heroism on the morning of 6 Jun 1963 while serving as Electrician on watch in the forward engine room on board USS *Vital* (MSO 474), operating in the Gulf of Mexico. When a severe fire broke out in the forward engine room, the Petty Officer in charge of the watch attempted to hold back the flames, using an installed carbon dioxide system, while Wallace de-energized all electrical circuits in the space, secured a generator in the area of the fire, and then attempted to place another generator on the line in order to supply vital power to the ship. Only when at the point of exhaustion, and after all fire-fighting capabilities had been expended, did Wallace evacuate the space and seek safety.



BRONZE STAR MEDAL

"For heroic or meritorious achievement or service during military operations . . ."

★ COWAN, Daniel R., LT, USN, for meritorious service during the period 18 Jun 1962 to 1 Jul 1963 while serving in the Navy Section, Military Assistance Advisory Group, Vietnam, as Operations and Readiness Advisor to the 23rd and 25th Vietnamese Assault Groups at Vinh Long and Can Tho, respectively, and Naval Advisor to the Commander 42nd Defense Tactical Zone, Republic of Vietnam. Exposed to rockets, mines, and sniper fire during 12 operations involving actual combat with Viet Cong forces, LT Cowan skillfully advised, encouraged, and stimulated his Vietnamese counterpart to aggressive, determined, and confident action, making a marked contribution to the successful completion of all operations. LT Cowan constantly sought methods for improving operational techniques with his River Assault Groups. Mainly through his efforts, the concept of small task groups composed of an LCM and high-speed boats has been developed and employed in combined operations.

BOOKS

GREAT PERILS AND HOPES IN THIS MONTH'S LIST

A SUMMATION of the books chosen for review this month would suggest that we walk a perilous path indeed these days, and only clear sharp thinking can save us. Here's the evidence, all of which can be verified in your ship or station library:

The Croft of Intelligence, for example, will keep you looking over your shoulder for days. And that's as it should be, for author Allen Dulles wants to warn everyone of the dangers of subversion and espionage—on the part of our opponents, of course. He is in a position to know for, not only was he director of the Central Intelligence Agency for eight years, but he has had nearly 50 years' experience in foreign affairs, in which espionage and counterespionage have played a large part. He tells a great deal about how intelligence is collected and processed and how the resulting estimates contribute to the formation of national policy. Not only does he discuss concrete facts and cases, but he also discusses at considerable length the philosophy and role of intelligence (in the spy sense) in a free society threatened by world - wide enemies.

Dulles labors to convey the idea that every stranger (or one of your best friends) may possibly be a cloak-and-dagger type. If such is the case, living abroad must be perilous indeed. Perhaps. But in **Young Americons Abrood,** edited by Roger H. Klein, the experiences of 10 young U. S. citizens living in foreign lands are described. Ranging in ages from 25 to 35, they lived in countries such as Russia, Poland, Burma, Iran and Ghana for periods ranging up to several years.

Why do they go, and what do they find when they get there? How do they react to living and working conditions, the politics, the different ways of looking at the present and future? What do their hosts think of them, as Americans? It isn't all sweetness and light but, as Dulles attempts to warn us of the walls between nations and people, **Young Americons** helps to remind us that people are more alike than they are different, no matter where they live.

Dulles poses the problem, **Young Americans** suggests that we learn to live with it, and **Mathemotics,** by David Bergamini and the editors of *Life* magazine, suggests that we try to apply a modicum of logic to it. As with all of *Life's* publications (this is one of its Science Library series) the presentation is slick, tight, and full of illustrations. The subject matter ranges from finger-counting, symbols, calculus, probability and chance, to the "new" mathematics. And, of course, there are plenty of pretty pictures and diagrams elucidating the aspects of space navigation. Make up your mind—you're going to have to learn something about the subject sooner or later, and **Mothematics** is as painless a way as we know. It's quite possible that, had such a textbook been available when we went to school, we might have taken an interest in the subject. There wasn't, we didn't, and now we wish we had. Pros will yawn, but beginners will find it fascinating. We're not sure how much it will aid international relations.

Escope, by Eloise Engle, suggests a possible alternative, but this form of escape isn't quite what you think. This is the relatively simple, straightforward, physical type. Miss Engle simply describes the evolution of methods of escape from failing forms of transport — parachutes first, of course, then the ejection seat, ascents from submarines and supersonic bailouts. She has interviewed dozens of men who developed and tested these systems, and each has a story to tell. Miss Engle tells them well.

Even the fiction is a little grim this month. **Shadow of Peril,** by Aleksandr I. Zhdanov, concerns a spy sub that penetrates New York harbor. There's a bit of nonsense about attempting to capture an astronaut's space capsule that *also* shows up in harbor, but the main theme seems to be the conflict between bureaucratic red tape and men of the sea. Stated this flatly, the story doesn't sound like much, but Zhdanov (which isn't his name) tells a galloping story and knows his submarines.

Alistair MacLean, who has recently produced **Ice Station Zebra,** also knows his submarines—in this case a mythical U. S. nuclear-powered job which goes under the ice in the Arctic to rescue a clutch of stranded and imperiled naval scientists from the ice. Among them is a dastardly foreign agent who is quite willing to murder all of his shipmates and sink the sub to achieve his equally dastardly aims. There is also the usual business of the fate of nations hanging in the balance only to be resolved by the tight-lipped good guy. The action doesn't leave too much time for characterization, but MacLean's description of the sub's crew and skipper might be of interest to real-life submariners. In one respect, the book is truly unique —no heroine, other than the sub; no love interest, other than the crew's regard for their ship, USS *Dolphin.*

MacLean finds strong competition in the storytelling field in Douglas Heyes' **The 12th of Never** (now, *there's* a title for you). This concerns a bit of insurance - cheating hanky - panky which becomes all fouled up when the intended and, up to that moment, willing, victim falls in love—and discovers that life has rewards that might not be found in the hereafter. His inevitable demise by cancer turns out to be not so inevitable after all. There's a matter of switching identities; unexpected and unwanted recognitions and the usual paraphernalia of such yarns. Nevertheless, the whole thing is quite believable, primarily because Heyes is an excellent writer.

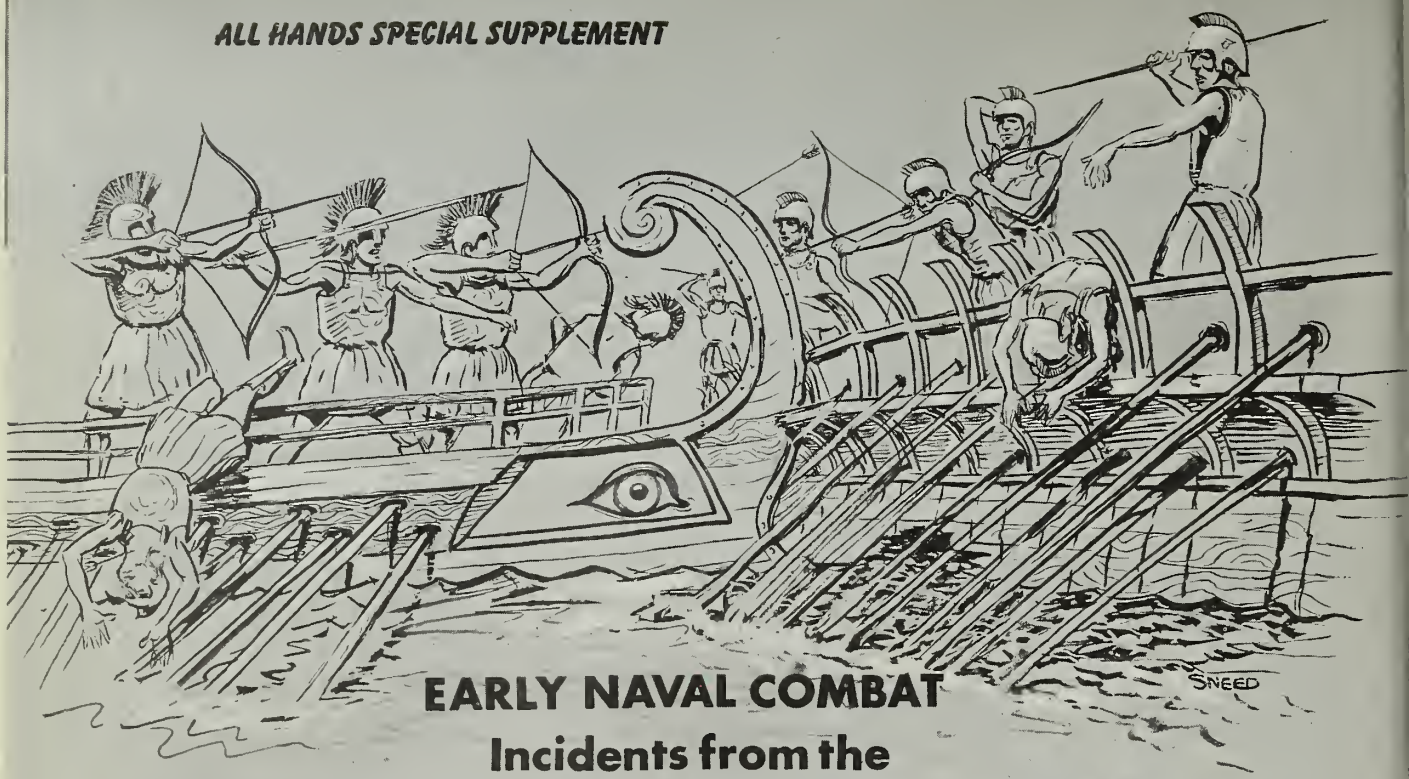
If it's your dish, happy shudders.

Constitution's Story Told

The complete story of USS *Constitution* may be found in the illustrated book *Old Ironsides* by Captain Thomas P. Horgan, USNR (Ret).

Old Ironsides tells the full history of the ship, beginning with the designers' first ideas about a tough new class of frigates, to her construction, her career as a fighting ship and finally her permanent berth in Boston. The narrative is accompanied by a series of illustrations and photographs which capture the spirit of the 167 year-old sailing ship.

The foreword to the book was written by late President John F. Kennedy. The introduction is by RADM Samuel Eliot Morison.



EARLY NAVAL COMBAT
Incidents from the
PELOPONNESIAN WAR

Some time back, ALL HANDS *published a special supplement entitled "The Birth of Sea Power" (January 1963), concerning the defeat by the Greeks of the invading Persians in the fifth century B. C. Sea power played a significant role in this important moment in history.*

In this issue we again reach back into early naval history, to record a few incidents from the Peloponnesian War, which lasted 27 years. The struggle was between two factions which were vying for control of ancient Greece. It took place about half a century after the defeat of the Persians.

The Peloponnesian War, made famous by the great historian Thucydides, had—in its way—as much impact on history as the war between the Greeks and the Persians earlier in the century.

It is also of interest to the Navy reader because the war was fought on sea as well as on land.

Athens had a reputation as a sea power. Sparta and her allies were better known for their military capabilities on land, but they too came to excel in sea warfare.

For our purposes the incidents selected provide a picture of the development and growing importance of sea power in warfare in the fifth century B. C. Also described are some early lessons in strategy and tactics.

THE PERSIAN AND PELOPONNESIAN Wars both turned on sea power. Unlike the Persian Wars, the Peloponnesian War was not, in its early stages, based upon territorial expansion, but was waged rather for control of trade and profits. During the expansion of Greece following the Persian War, most trade was controlled by two rival commercial leagues—the Delian, headed by Athens; and the Peloponnesian League, the strongest members of which were Corinth and Sparta. Each city had a fleet for the purpose of protecting its commerce from pirates and from attacks by the other league. In fact, the distinction between piracy and what was later to be known as privateering was very slight—if it existed at all. Piracy was largely a method of dealing with commercial competition.

By the time of the Battle of Salamis in 480 B. C., Athens had maintained a considerable trade as far away as the Black Sea and had the greatest navy in Greece. At the time, Corinth was Athens' principal commercial rival, with connections mostly with the Greek colonies in the west. She was the leading commercial state in the Peloponnese (which was the western portion of the Greek mainland), where her political interests also lay.

Following the victory against the Persians at Salamis, the allied Greek fleet conquered both Cyprus and Byzantium. The possession of the latter assured Greek control of the wheat trade of the Euxine (now known as the Black Sea), and was a step in the formation of the Delian League, which in turn, was the outcome of the original anti-Persian League. The headquarters and the treasury of the Delian League were located on the tiny island of Delos—hence the league's name.

Sparta would have no part of the new Delian League. She was a monarchy ruled by a military aristocracy, conservative in outlook, and was satisfied to leave the Aegean Sea and surrounding waters to those maritime

Freely adapted from *Greek and Roman Naval Warfare*, by Vice Admiral W. L. Rodgers, USN, copyright © 1937 by the U. S. Naval Institute, Annapolis, Md. Reproduced by permission of the copyright owners. Illustrations on pages 59 and 63, are adapted from this same book.

states which considered the sea and overseas trade important. For her part, she would rely upon her army (which was extremely efficient) and the resources of her own homeland.

While Athens, the sea power, looked more and more outward, Sparta turned ever more inward, fearful of her own slave population, distrustful of Athenian intentions, and prepared for the war which appeared inevitable.

As the tension grew between the two states, the smaller Greek communities found it necessary to seek the protection of one or the other of the two major camps. Sparta took under her leadership the Peloponnesian League of neighboring states which depended upon the Spartan army. Athens retained and expanded her control of the Aegean Sea.

Conflict finally broke out as the result of a clash between Athens and Corinth, the Spartan ally, over rival spheres of influence. Corinth appealed to Sparta for help and, in 431 B. C., the disastrous and lengthy Peloponnesian War began.

The Athenian ships were not as heavily equipped as the others. Their superiority depended upon lightness and sound construction as well as the skill and daring with which they were handled.

The advantage in speed of the highly trained Athenian crews cannot have been great—perhaps half a knot at extreme speed for half an hour and less over long distances, combined with greater long-time endurance—but it was significant.

They could delay action while exhausting the enemy by goading him into fruitless attacks, then could either attack or refuse battle. They could ram and back away with only a moderate risk of becoming involved in a boarding fight. Above all, the superiority of the Athenians gave them a moral advantage which was worth as much or more than the physical one. Instead of hoping to meet the enemy at a fixed point with covered flanks, as Themistocles had found necessary at Salamis, the more modern fleet preferred the open sea, where it could keep the enemy on the move, knowing that exhaustion would come to the enemy sooner than to itself.

It would appear that, within the intervening years, the Athenians somehow had made a startling discovery. Instead of using their ships merely as vehicles to transport soldiers, they presumably had learned that the ships themselves—if skillfully handled—could be used as weapons.

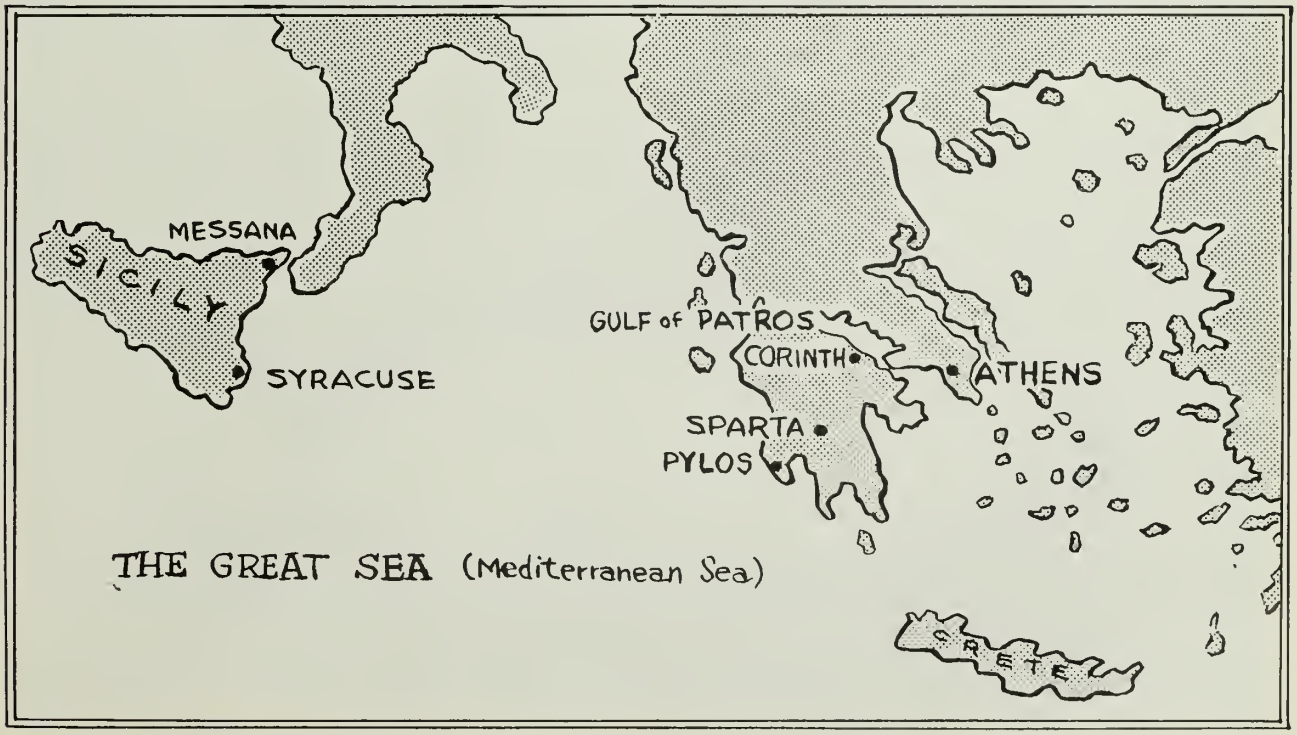
This conclusion was probably not new in the historical sense at the time and, in years to come, the principle would be lost only to be recovered centuries later. Nevertheless, at the moment, it was revolutionary.

Thus, at the beginning of the Peloponnesian War, the Athenians had completely changed their style of naval warfare from the tactics of Salamis. At that earlier time, the rowers were exposed, except for their shields, along the ship's side. By the time of the Battle of Sybota, the minor opening engagement of the Peloponnesian War, the oarsmen were better protected, with a deck *(catastroma)* over their heads.

At Sybota, all except the Athenians still fought an infantry fight with ships filled with soldiers. Only the Athenians had reduced the number of soldiers on board. The reduction in soldiers and their gear was one factor which made the Athenian ships handier in battle. If an Athenian ship should become involved in a ramming or collision, the oarsmen were then expected to come on deck with their arms and give battle.

Again, at Sybota, the lines of enemy ships were more or less compact and, after one ship had fouled another, they were unable to get clear. The Athenians, on the

THE ARENA—This is where warriors of the sea and land, Athenians against Peloponnesians, fought for 27 years.



other hand, were in much more open order, thus providing more maneuvering room.

The first major naval event in the war arose out of the struggle to control the lands on the northern side of the Gulf of Corinth. At the time, the major portion of the Athenian fleet was stationed in the Aegean Sea. Because of this, the western Athenian fleet could not hope to be strong enough to stop the Corinthian western trade altogether. Nevertheless, in the winter of 430-429 B. C., Athens sent a squadron of 20 vessels under the command of an admiral named Phormio to operate against enemy vessels in the Gulf of Corinth.

Opposing Phormio were 47 triremes with some 1000 heavy-armed Spartan troops on board, plus numerous small craft which served as supply ships.

When intercepted in open waters in the Gulf of Patras just before dawn, the Peloponnesians immediately went on the defensive, although they greatly outnumbered the Athenians. They formed with warships in a circle, prows outward, and rested on their oars in the calm sea. Inside the circle their five best warships were placed to reinforce the outer ring at any point, and the smaller vessels huddled in the center.

Phormio had no intention of using the customary boarding tactics of the time, for he was outnumbered and he knew the enemy ships were heavy with infantry. Instead, he ordered his ships to await his signal to attack and meanwhile to row in a single column round and round the enemy circle, brushing close and feigning attack, so that the Peloponnesians backed water and gradually contracted their circle.

When the wind for which Phormio was waiting blew out of the Gulf with the rays of the rising sun and ruffled the surface of the water, the stationary ships of the Peloponnesians were blown foul of one another in the confined space. Men leaped up to stave off the neighboring vessels with poles, the air rang with shouts of abuse and the orders of the boatswains went unheeded. Even on those ships where the crews stayed in their places, they found it difficult to feather their oars, and their ships—not being under way—answered sluggishly to the rudder.

At this point, Phormio gove the signal to attack, and the Athenians rowed in to ram their opponents broadside. Wherever they attacked, they crippled their victims without the loss of a ship. Those of the Peloponnesians who were able, fled. The Athenians sank or captured 12 triremes during the following pursuit.

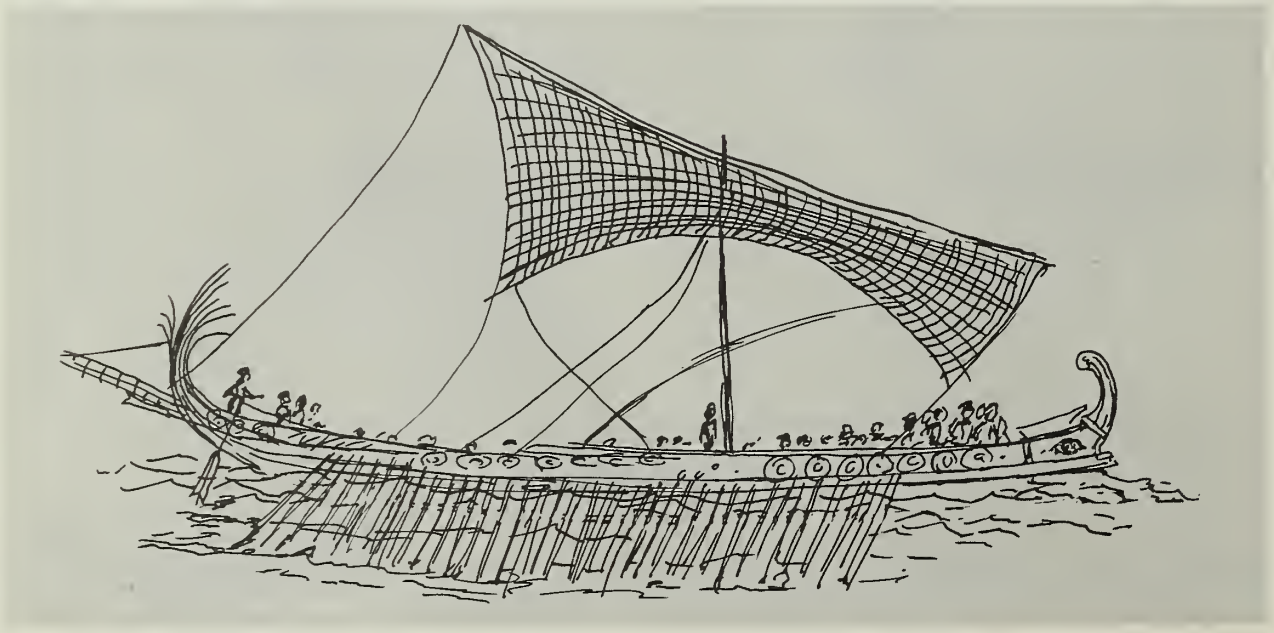
AFTER THE ACTION in the Gulf of Patras, Phormio requested reinforcements. Another 20 ships were sent him, but were delayed by orders to undertake a secondary operation on their way around the Peloponnese. Meanwhile, the Peloponnesians remobilized their fleet and started to meet Phormio with a total of 77 ships. They halted just within the entrance of the Gulf of Corinth on the southern side, where an army had come to support the fleet.

Phormio left Naupactus, his naval base, with the same 20 ships which had fought off Patras, and took position opposite the enemy on the northern side of the Gulf, where the local inhabitants were friendly and had assembled a number of soldiers to support the Athenians if need be.

The Athenians came to a halt just outside the narrows. Seeing this, the Peloponnesians also came outside the narrows on *their* side. The two fleets could easily observe each other, as the opposite points of land were only a couple of miles apart.

For about a week the two fleets eyed each other, the Peloponnesians preferring the coming battle inside the narrows where the shores were not far distant and where they had the support of the army in case they should be compelled to beach their ships. Phormio, on the other hand, wanted to draw the enemy outside the narrows where he had plenty of sea room. However, the Peloponnesians hesitated to delay too long for they too knew of the scheduled arrival of Phormio's reinforcements.

As time went on and the Peloponnesians saw that the Athenians would not attack, they decided to attack Phormio's home base at Naupactus and thus force him to give battle before he was reinforced. At the time they were lying at anchor in four lines with the best



ships to the eastward. In the morning they got under way and, without altering their formation, moved toward Naupactus on their own side of the straits in four columns in line with the fastest ships leading. Thus the leading ships were in the most favorable position to interpose themselves between the enemy and the port he was compelled to defend.

As the Peloponnesians hoped, Phormio embarked his crews in the greatest haste and hurried toward Naupactus while the local troops with him moved along the shore abreast of him. When Cnemus, the Peloponnesian admiral, saw the enemy within the gulf in a single column (probably 1500 yards long) coasting near the shore and, as he thought, within striking distance, he turned his ships simultaneously to the left and charged in four lines, with a front probably about the length of the Athenian column.

Owing to his misjudgment of pace and distance, 11 of the Athenian ships passed his right. The eleventh was hotly pursued by the leading Peloponnesian ship, which had outdistanced all the others. As the Athenian ship drew near Naupactus, she suddenly doubled around a merchantman which happened to be riding offshore, and rammed her pursuer broadside.

The deftness and aggressiveness of the maneuver threw the other Peloponnesians into utter confusion, and something very near panic ensued. The leading ships halted the pursuit in bewilderment. Some lost their heads and ran aground on the nearby shallows; others lost way and rested on their oars to see what would happen next. This was disastrous. The Athenians immediately charged and drove the entire fleet before them in wild disorder. They captured six more vessels and recovered nine of their own which had been damaged at the beginning of the engagement.

THIS BATTLE, like the earlier one, was tactically an effort on the part of the Corinthians of the Peloponnesian League to make it a boarders' fight, while the Athenians preferred a fight of maneuver. Each was partially successful, but the advantage of maneuver by the Athenians was never afterwards displayed to so great an extent as under the direction of Phormio. In the future, the Corinthians made it a point to deny them the opportunity to maneuver.

The Athenian naval tactics of the day were based upon three conditions: Better-trained crews; faster, handier ships; and liberty of choice of the open sea for the place of battle. If any one of these requirements were missing, the tactics would fail.

For the next few years, there was little of naval interest, although Athenian squadrons were busy everywhere from Sicily to Asia Minor, covering Athenian trade, escorting and supplying military expeditions and landing raiding parties.

Everywhere they met more or less resistance from hostile naval forces, but the Athenian hold on the Aegean Sea was unshaken, and in western waters some gains were made. Peace overtures were made, but refused by Sparta. At home, the war was not going well. Plague devastated the city of Athens and the Spartans ravaged the surrounding countryside.

Nevertheless, the Athenian seizure of Pylos in 425 B. C. demonstrated to Athens and her allies that Sparta was not invulnerable. The fighting was bitter.



TRAINED IN SEA WARFARE, the ancient Greek, dedicated to the cause, fought courageously in battle.

IN THE FALL OF 427, the Athenians sent a squadron of 20 ships to capture Messena, Sicily, to prevent the importation of grain into the Peloponnese. The following year, Athens decided to reinforce its squadron operating in Sicilian waters with another 40 ships.

When off the west coast of the Peloponnese, the reinforcing squadron heard that a Peloponnesian force of 60 ships had preceded it. While the Athenian leaders deliberated as to their future action, a gale blew their ships into the harbor of Pylos.

Demosthenes, one of the Athenian admirals, strongly urged his colleagues to fortify the rocky point of Pylos. Ample material was available, and the harbor could be used as an important way station but the others were unimpressed by his arguments. However, the fleet was held in port by contrary winds and, in the meantime, the ships' crews, for want of anything better to do, began to fortify the point. After waiting out the storm for a few days, the main body of the fleet moved on, leaving Demosthenes with five ships to hold the port.

The Spartans were at first inclined to treat lightly the occupation of Pylos, as they were sure that they would have no difficulty in driving out the Athenians. Nevertheless, when the Spartan army then invading Attica heard the news, they withdrew their forces and recalled their 60 ships for an attack on Pylos.

To bar the entrance to the harbor, the Spartans occupied the island of Sphacteria in the harbor and, although they had intended to anchor a line of ships across the entrance channel, they neglected to do so. Demosthenes drew his three ships (the other two had been dispatched for help) on shore inside the harbor

and then herded everyone into the fortifications, except for a few men stationed outside the wall where he thought the enemy might land.

The Spartans made simultaneous assaults by land and sea on opposite sides of Pylos. The soldiers at the northern end were stopped cold by steep cliffs. On the southwest side, where 43 ships attacked, the shore was not steep but the bottom was rocky. The captains hung back for fear of wrecking their ships. At last the captain of a trireme decided it was time to sacrifice a ship in order to make a landing. He forced his pilot to run ashore where his crew was repulsed by the Athenians.

This was enough, for the moment, for the Spartans. They decided to suspend operations until they could find timbers for siege engines.

MEANWHILE, THE ATHENIAN FLEET, now increased to 70 vessels, returned and found the harbor occupied by the enemy. In the morning the Athenians charged through the entrances to the harbor while the Spartans were still standing by their ships and making ready to launch them. Some of the Spartan vessels got off into deep water, but these the Athenians soon put to flight after damaging some and capturing five. The Athenians then returned to attack those vessels which had not left the beach, but the whole Spartan army hurried to the shore and, after a long fight, managed to save their empty ships.

This action, however, had completely reversed the situation. The Athenian fleet was now in complete control of the harbor and the Spartan troops on Sphacteria were isolated.

In their anxiety to save their troops, the Spartan generals consented to an armistice, on condition of temporarily yielding in pledge all their ships which were present, until a permanent peace could be arranged. Should no peace be made, the ships would be returned and the armistice ended. In the meantime, the rations of the Spartans on Sphacteria had to be severely limited.

(In the discussions at Athens the terms of the Spartans were rejected and the armistice ended, but the ships continued to be held by the Athenians.)

Sphacteria was now closely blockaded for several weeks. The siege was almost as difficult for the besiegers as for the besieged. The Athenians had no place available to haul their ships ashore, and only one small well was available for the entire fleet. The crews would take turns in eating their meals on shore and getting water while the rest of the ships lay at anchor on both sides of Sphacteria.

On the Spartan side, great efforts were made by night to supply the garrison by men in small boats and by swimmers. These attempts were so successful it was feared at Athens that the blockade might last until the season of bad weather compelled its abandonment.

BECAUSE OF THIS possibility, a large expedition was sent from Athens to land on Sphacteria and make an active assault.

The main body of the Spartans was at the center of the island where there was a fortification and a well. An outpost of 30 men was stationed at a hill on the southern extremity. After the heavy-armed troops from Athens had arrived, 800 of them were placed in ships and, a little before dawn, they attacked and overran the landings and the outpost.

Now in possession of the landings and their covering hill, the Athenians put ashore two-thirds of the rowers of the fleet, leaving only enough men to handle the ships.

The Spartan main body saw the loss of their outpost, and formed a phalanx to advance against the enemy. The Athenian heavy-armed troops who had first landed also formed a phalanx and the two bodies stood facing each other. The Athenians, although vastly outnumbering the Spartans, refused to move, as the ground was too rough to maintain the rigid formation which made the phalanx effective.

Meanwhile, the Athenian auxiliary light-armed troops swarmed up from the landing points and surrounded the Spartans. The latter could neither get at the auxiliaries nor ignore them to advance and attack the waiting phalanx. As the ancient writers phrased it, they were "much distressed," and found it impossible to retain their main position in the center of the island, so they fell back to a strong position at the northern end of the island.

In their final stand, the Spartans put up a strong defense but they did not occupy the very highest points of a precipitous rock immediately behind them, and eventually some Messenian allies of the Athenians found a circuitous route for their light-armed archers and javelin men to reach the summit. From this point, they were able to shoot inside the Spartan position at their leisure. Unable to attack or to defend themselves, the Spartans surrendered. There were but 292 survivors.

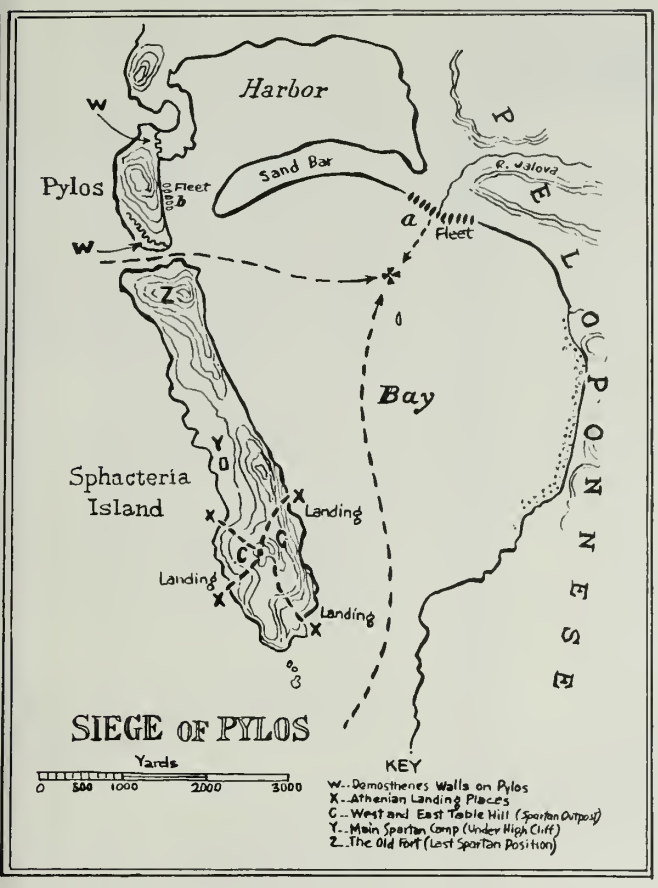
Although the siege of Pylos was relatively insignificant in the over-all view of the Peloponnesian War, it marked another step in the history of European warfare. According to the standards of the day, Sparta's military prestige was shattered. Its phalanx had not been able to hold its position against light-armed troops.

Before this occasion, Greek battles had been decided by the charge of the phalanx of many ranks of heavy-armed spearmen, and the light-armed auxiliaries merely foraged and reconnoitered before battle and threatened the flanks during the battle.

Here, the missile weapons took an active part, while the Athenian phalanx merely stood in readiness. Men whose primary business was with the sea had landed and defeated troops of a city-state which was supreme in land warfare. True, the odds were all on the side of the Athenians, but it was their control of the sea which had made those odds possible.

For years, the naval aspects of the war remained stalemated. On land, the Athenians suffered defeat after defeat; the city of Athens itself was ravaged and destroyed, its crops burned, and its citizens died by the thousands of the plague.

Meanwhile, one of the truisms of warfare began to make itself felt. At the risk of oversimplification, it runs something like this: If a war lasts long enough those combatants who, in the early part of the war suffered defeat will, if flexible-minded enough, begin to adopt the tactics of the victors. When this comes about, it is



likely that the side which earlier lost the battles will eventually win the war.

In this case, the Peloponnesian League had learned the hard way something of the naval tactics of the Athenians. It was, in part, this change in outlook which contributed to the disastrous defeat of the Athenians at Syracuse, the first of several major defeats which brought the long bitter war to an end—an end disastrous to all Greece.

Many factors contributed to Athens' defeat, but most certainly, internal dissension and quarreling political parties in times of crisis were major contributions. At the same time, Sparta discovered within her own ranks men capable of outsmarting the Athenians at sea as well as on land.

BY 416 B. C., Athens—bereft of many of her former allies—made one last desperate bid for final victory. In response to an appeal for help by Egesta, a colony in Sicily, Alcibiades, a brilliant (if unreliable) leader of Athens at this time, recommended that the most effective aid to Egesta would be an attack on Syracuse itself, the major city of Sicily. If Syracuse were defeated, the entire island would fall and Carthage, a trade opponent of Athens, would be crushed. The enhanced prestige and new allies resulting from the success of the expedition would be enough to turn the tide in Athens' favor.

After some hesitation the plan was accepted and, in June, a huge fleet under the command of three Athenian generals set sail. No sooner was the fleet underway when Alcibiades, one of the three, was recalled to Athens to face charges of sacrilege. (He never arrived. Knowing that he faced certain death in Athens, he escaped his captors and went over to Sparta, where he remained for a time, an enemy of his former compatriots.)

The Athenian attack began well with a landing at Dascon in Syracuse's Great Harbor. Six months later the entire Athenian fleet and army began to encompass the city with a wall on the land side while the fleet blockaded the harbor entrance.

Then things began to go wrong. Lamachus, the only "military" general of the three chosen, was killed; the fleet was defeated in a minor skirmish; supplies ran short and the Syracusans managed to build a cross wall which halted the Athenians' attempt to maintain a tight siege.

Nicias, the remaining general (who had always opposed the idea of the Syracusan attempt), begged desperately for more aid from Athens.

Demosthenes arrived with 73 more vessels and was badly defeated in his first attempt to destroy Syracuse's cross wall. Convinced that the expedition was doomed to failure, he tried to persuade Nicias, who had inexplicably turned stubborn, to leave Syracuse. When the Athenians were ready to retreat, it was too late. The Syracusans had thrown a boom across the month of the harbor and, in a desperate engagement, managed to inflict a heavy defeat upon the penned-up Athenians.

The Athenians abandoned their ships and fled for the hills surrounding the harbor. After that, it was merely a matter of mopping up. The two leaders, Demosthenes and Nicias, were fortunate, for they were killed as soon as they surrendered. Those Athenians who escaped the general massacre were put in the quarries of Syracuse, where they met a lingering death. Few escaped.

IT WOULD BE REASONABLE to expect Athens' immediate downfall. Sparta's fleet was now superior to Athens. Athens' treasury was almost empty; she was now held in a state of semi-blockade; 20,000 of her slaves had deserted; the remaining cities of her empire revolted; Persia had intervened on the side of Sparta.

Yet Athens managed to hold out another 10 years. A moderate party had taken over from extremists within the city. Another—and last—fleet was built. A partial victory in 411 B. C., helped restore confidence; a more complete victory the following year once more gave Athens hope. Alcibiades who, once more, had turned to help Athens, captured Byzantium in 408, thus assuring for a time a safe trade route for Athens' food supply.

In spite of the upturn of Athens' fortunes, the end was in sight.

The final blows were struck by the great Spartan admiral Lysander, who figured in a naval victory off Notium, another decisive victory at Aegospotami, and the siege and capitulation of Athens. The story is much too long to be told here. Briefly, Lysander, in spite of Alcibiades' best efforts, managed to split Athens' fleet, then defeated each portion one by one. He then moved almost effortlessly to blockade Peiraeus, Athens' seaport. After six months of starvation, the city accepted Sparta's terms.

Her walls were torn down; her empire ended.

If this has whetted your appetite for the whole story turn back to your favorite history and read the full account of the Peloponnesian War.

TAFFRAIL TALK

ALASKA has a reputation for its fine fishing, and the CO of Patrol Squadron One, on deployment to Kodiak, knows why.

CDR Frank Forsberg, USN, was flight checking LT Chuck Caldwell, USN, making full-stop landings on the Kodiak runways which lie next to the salmon-filled Buskin River.

On one landing CDR Forsburg was confronted by two events which called for quick action. First, he saw salmon leaping out of the Buskin as they headed upstream, and second, he saw a friend nearby with fishing gear, trying his luck.

CDR Forsburg gave orders to prepare for the next takeoff, then hopped from the plane, trotted 50 feet to where his friend was standing, and quickly negotiated for the loan of his fishing gear.

He cast the line, reeled it in, then quickly cast again. This second time he got a strike.

He reeled in a 16-pound silver salmon, thanked the friend for accommodating him, then crossed back to the *Neptune*, readying for takeoff.

His catch was still wiggling as he climbed back aboard the plane after just seven minutes.

★ ★ ★

ALL HANDS' art staff was short one man when this issue went to press. Fontaine Maury Sneed, who had occupied the corner desk for over two years, left the office in January. He's still behind a Navy drawing board, however, in a different section of the city.

While we're still looking for another civilian artist, a military crow-quill type is getting used to the magazine's routine. He's Robert J. Grabowski, SA—"Ski" for short—who arrived in D. C. fresh from recruit training at Great Lakes.

Ski is admittedly a boot as far as the Navy goes, but he's had lots of training in his profession. Originally from Stamford, Conn., he enlisted in the Navy after completing four years of study at an East Coast art college and work in commercial art. He says he joined the Navy for experience. He'll undoubtedly get it—watch for his centerspreads.

★ ★ ★

Everyone has occasional bad moments but, for a certain Navy paymaster, the worst time of all was probably a few tooth-gnashing minutes last July.

It was payday, but when this particular paymaster spun the dial on the safe and gave the handle his usual jerk, the only result was a hollow clunk from inside.

Since there are few people more unpopular than a paymaster who won't fork over, he tried again. And again. Still no luck. By this time the word had spread around and grim murmurs came from the crowd growing outside the office. Desperate, the paymaster turned to the group for help. There were plenty of volunteers, but no one could deliver the goods.

At this point USS *Prairie* (AD 15) offered just what was needed: an honest safecracker. F. L. Herbert, SF1, walked aboard with his black bag, jimmied the safe, and opened the door. While the crowd watched, $28,000 fell onto the deck.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington 25, D. C.

• **AT RIGHT:** CHILLY SCENE— The icebreaker USS Edisto (AGB 2), one of the troilmakers in the Antorctic, rests in boy near Hollett Stotion. Moking for o scenic bockground is Mount Herschel.



In Today's Navy - A Basic Theme



PEOPLE TO THE FORE IN 1964

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

UNIVERSITY OF MAR
SOCIAL SCIENCE
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This magazine is intended for 10 readers. All should ... it as soon as possible. ... OPY ALONG

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MARCH 1964



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

MARCH 1964 | Nav-Pers-O | NUMBER 566

REAR ADMIRAL A. S. HEYWARD, Jr., USN
Acting Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistant Chief for Morale Services

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G. Vern Blasdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

• **FRONT COVER:** DOWN TO SEA—Fleet ballistic missile submarine Sam Rayburn (SSBN 635) slides down the ways during launching ceremonies at Newport News, Va. The new Polaris packer is scheduled for commissioning about December 1964. —Photograph by B. L. Bennett, PH1, USN.

• **INSIDE FRONT:** IN LINE—Crew members of attack aircraft carrier USS Oriskany (CVA 34), lined up on the flight deck as they enter port, are reminders of the current Navy theme 'People to the Fore in 1964.'

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.

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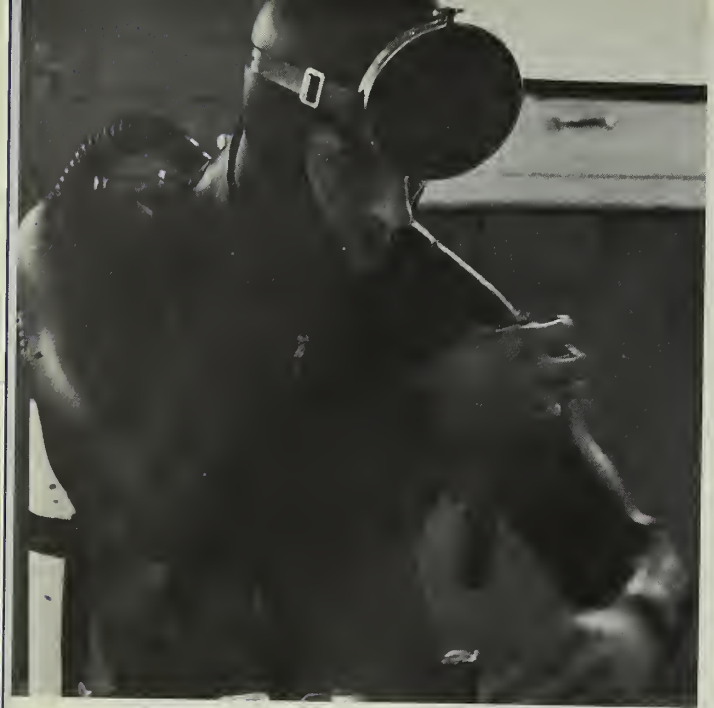
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CHECK UP — Damage controlman-diver adjusts Scuba harness and (rt.) radiological control team takes a reading.

Polaris Subs Get Tender

ONE REASON our *Polaris* submarines are able to devote the maximum possible amount of time to patrol missions is because the Navy has developed *Polaris* submarine tenders.

Polaris sub tenders are tailor-made to provide complete service to the growing FBM fleet from an overseas anchorage. Because the subs play an immeasurably important role in the defense of our country, the tenders have an important mission—more than meets the eye.

USS *Proteus (AS 19)*, the first ship designed for this purpose, was a World War II *Fulton*-class sub tender which was taken out of mothballs, subjected to a complex conversion process, then—in March 1961—taken to Holy Loch, Scotland, to set up housekeeping.

From the start, the *Proteus* crew were charged with putting the submarines into better-than-new condition between patrols ("progressive maintenance") under rigid time limitations—regardless of how much or how little work was involved. The *Proteus* crew developed a maintenance system which was equal to these pressing demands.

Proteus continued her labors in an outstanding fashion for almost two years. Then, early in 1963, another tender appeared in Holy Loch, bid *Proteus* farewell, and settled in to care for the FBM brood.

THE FIRST — *USS Proteus* (AS 19) loads a *Polaris* aboard *USS Patrick Henry*.



IF THIS NEW TENDER seemed extraordinarily proud (or perhaps a wee-bit conceited), and seemed to look down her stack at the departing *Proteus*, there was a certain degree of justification for her haughtiness. For this ship was the new USS *Hunley (AS 31)*, the first submarine tender built since World War II and the first ever built from the keel up as a *Polaris* sub tender.

Now there are three *Polaris* tenders. Besides the converted *Proteus* and the *Hunley*, there is a sister ship to the latter named *Holland (AS 32)*. All three are of strategic importance to the *Polaris* program.

For the statistically minded, a record of the evolution of the *Polaris* tender would go something like this:

On 15 Jan 1959 *Proteus* arrived at Naval Shipyard, Charleston, S. C. Her conversion was begun four days later. To enable her to accomplish tasks which were not provided for in her original design, *Proteus* had to be cut into two parts and have a "plug" inserted 12 feet forward of the original midship. The new plug was six decks high (63 feet, seven





AT WORK — Crew members work in radiological control and shipfitter shops. *Below:* Divers surface after hull check.

Care

inches) with a beam of 73 feet. (*Proteus* was originally built in 1942 as an 18,000-ton, 530-foot tender. She now displaces an additional 500 tons and is 44 feet longer.)

She was commissioned on 8 July 1960 and completed her fitting-out period a couple of weeks later.

ON 16 NOV 1959 A CONTRACT was let for the construction of *Hunley*. Work started 15 July the following year, the keel was laid on 28 Nov 1960, and *Hunley* was launched 28 Sep 1961. When commissioned on 16 Jun 1962 she became the second *Hunley* in American naval history (the first was the Confederate submarine named for its financial backer Horace L. Hunley, a wealthy Tennessee native. On the night of 17 Feb 1864 CSS *Hunley* claimed her page in the history books when she became the first submersible ship to sink another ship—the Union sloop *Housatonic*, in Charleston harbor).

The new *Hunley* is 599 feet long with a beam of 83 feet, and displaces 18,300 tons. She will do 19 knots.

Holland, commissioned 7 Sep 1963, is named in honor of submarine inventor and builder John P. Holland. She is the third ship of the Navy to bear the name. The first was a little cigar-shaped submarine—the first commissioned in the U. S.



ON DUTY — *USS Hunley* (AS 31) was built from keel up as an FBM sub tender.





ROLL ON—Stores are stowed aboard *Polaris* submarine. *Below:* Power cables are run aboard as *USS Sam Houston* (SSBN 609) ties alongside the tender.



Navy—launched in 1897. This submarine, designated the S-1, was 53 feet long, had a submerged displacement of 74 tons, and cost $150,000. The second *Holland* was launched in 1926 as a submarine tender, the third in the Navy to be so designated.

The new *Holland* has dimensions and displacements comparable to *Hunley*.

ALL THREE TENDERS are capable of making any submarine repair short of a major overhaul, including servicing the nuclear power plants of the atomic submarines, and servicing and supplying the missiles and other ordnance carried by them. The tenders have complements of 50 officers and about 1400 enlisted men.

On these tenders, the Engineering and Repair Departments are among the busiest. They have approximately 500 men assigned (they used to be a combined department). The responsibilities of the former include normal engineering functions and the latter has duties associated with repair work on the subs.

The Repair activity is concerned with the operation of 52 shops. These repair facilities compare favorably with those of any naval shipyard, except in over-all size. The ships' mobility permits these capabilities to be delivered to any part of the world.

A highly organized scheduling of work between shops is the key to the success of a rapid upkeep operation.

LOCHED UP — *USS Hunley* goes about the work of tending her brood with the Cowal Highlands as a backdrop.







ON BOARD — Diver is suited up to inspect submarine's skin and (rt.) salad is prepared in *Hunley's* spud locker.

Work requests are filled out for each task that must receive attention on a sub when it ties up after a patrol. These work requests are sent to the various shop officers, who in turn estimate the manhours per job.

All this information is then recorded by an electronic accounting machine (EAM), and the EAM keeps close tabs on the way work is progressing. If a particular job is behind schedule according to the EAM, a little overtime may be in order. Repair officers meet regularly to discuss any problems they have, such as with scheduling of work.

All work must be scheduled this meticulously because there is no time for duplicated effort. Manhours are conserved as carefully as the proverbial Scotsman saves his coppers—with good results.

TECHNICAL BACKGROUND is a necessity for the repair force. A large per cent of the tender officers are ex enlisted men. Most members of the enlisted repair force have had Navy schooling in some particular trade, and many of these men have completed additional instruction through industrial courses. Project training classes on board familiarize them further with the work, and a rotation program allows for crew members to go to school, then return to the ship.

According to *Proteus'* ex-CO, a sense of immediacy must be maintained because, under the new system, the repair force is bound by a short-duration repair schedule. Work cannot be done experimentally —the crew must know well in advance exactly what procedures will be used and they must be highly skilled in using them.

The tenders have all the usual shops, plus others peculiar to their special mission. Gyro ovens, mechanical standards lab, electronic calibration lab, sound analysis, radiological control—these are terms new in the modern Navy. Because the tenders are isolated from well-equipped shore installations, many of the shops are expanded to improve self-sufficiency. The water test labs, for example, are comparable to industrial labs, and the rubber and plastics shops are similar to commercial ones.

A special supply chain has been set up to service the tender on duty in Holy Loch. This consists of regular support ship visits to the Loch, and MATS support for high-priority items.

Also, the tenders act as floating motels for the crews of submarines under repair.

The tender crews have a grave responsibility. Before entering World War I, the U. S. had about 32 months of warning that danger was in the making. Before being drawn into World War II, this time lead was 27 months.

Today such time is measured on a stopwatch. If there's a next time, we may have less than 32 *minutes'* warning. The *Polaris* submarine tender crews are aware of this.

—Bill Howard, JO1, USN

NUMBER THREE — *USS Holland* (AS 32) is Navy's third FBM submarine tender.





SHIP SHAPE — Navy students at NATTC Glynco receive training at realistic mockup of a carrier's CIC.

What Goes On in CIC?

EACH YEAR, nearly 4000 Navymen wend their way toward Georgia's Marshes of Glynn to a point near the resorts at Sea Island, St Simons Island, Jekyll, Blackbeard and Sapello Islands.

Tourists who come to the area take advantage of the water skiing and swimming facilities, but the Navymen arriving at the Golden Isles are headed for Glynco, Georgia's Naval Air Technical Training Center. Their mission is to learn what goes on in the Fleet's combat information centers and the Navy's air traffic control centers.

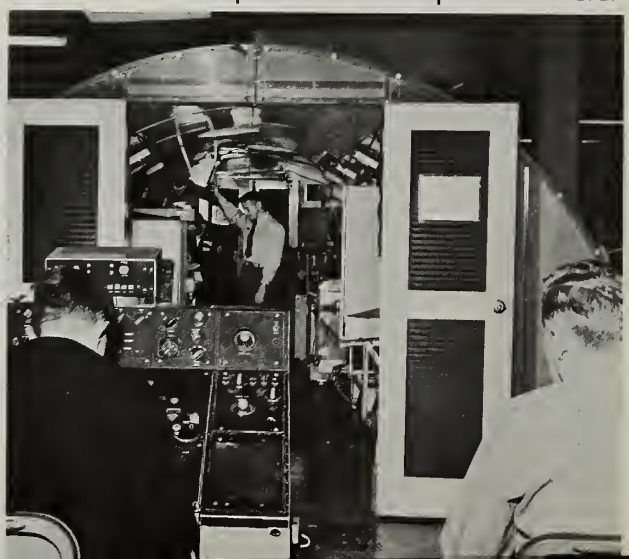
NATTC Glynco arrived at its present location via a circuitous route. During World War II, CIC officers were being trained at San Diego, Norfolk and Camp Catlin, Hawaii. These three installations were later converted to one school located at St Simons Island, about 15 miles from what is now NATTC Glynco.

In the years between the establishment of the St Simon School and the day in 1955 when the present installation came to rest at Glynco, CIC men received their training at Glenview Illinois' CIC Officers School.

At Glenview, the school began to use mockups of various ship combat information centers. Nowadays, during their sojourn at Glynco, prospective CIC men train in replicas of CIC spaces to be found in USS *Boston* (CAG 1), *Hancock* (CVA 19), *Constellation* (CVA 64), *Coral Sea* (CVA 43), *Worcester* (CL 144), *Allen M. Sumner* (DD 692), *Eugene A. Greene* (DD 711), *Carpenter*

CIC COURSES at Glynco turn out CIC specialists. Students man radar and practice in mockup of AEW CIC.





(DD 825), *Dealey* (DE 1006) and *Rasher* (SSR 269).

In its present form, NATTC Glynco has been combined with the air traffic control schools which were moved from Olathe, Kansas. The CIC classes continued to be taught in the buildings especially designed for them and the ATC schools moved into two blimp hangars which were left over from Glynco's days as a center for lighter than aircraft.

The CIC courses at Glynco turn out specialists capable of manning both shipboard and airborne combat information centers, air controllers for both intercept and antisubmarine warfare and radar intercept operators of the new F4's.

A radar intercept operator is an up-and-coming technician in today's Navy, since he is one of a two-man crew in some of the fastest aircraft coming off the world's production lines today.

From Glynco's converted blimp hangars flows a steady stream of sailors and officers who leave the air traffic control courses and go out to man Navy control towers at naval air stations and the Carrier Air Traffic Control Centers on board aircraft carriers. The ATC classes also turn out graduates for the Coast Guard, Marines and Army.

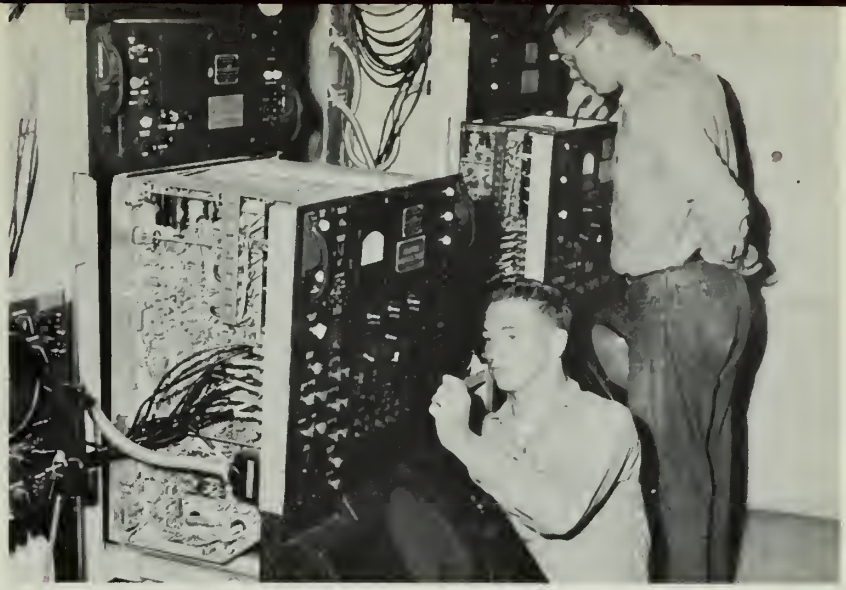
From Glynco's classrooms, CIC graduates go to the Fleet to man its combat information centers where they are the first to see threats to their ships as blips on their radarscopes.

Glynco's air traffic control men have to be good, for when a man is shepherding planes off and onto a carrier or a busy landing strip, there's no margin for error.

—Ray Lucasey, JO1, USN

STRIPES—Student checks GCA radar.

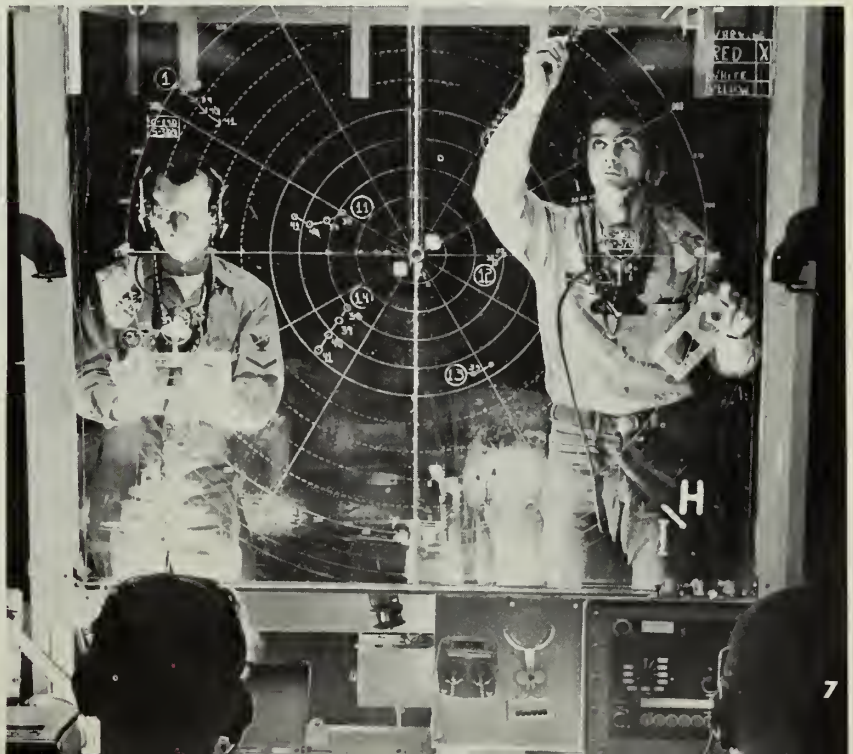




MAINTENANCE TOO—Glynco also teaches Navymen how to keep GCA gear running correctly. *Below:* Air control students learn in mock control tower.



BOARD WORK — Students keep Glynco staff members busy at plot board.







LARGE OR SMALL, new MCB equipment and allowance list shows kinds and amounts of gear needed for construction.

Seabees Use Lots of SOAP

IF YOU SHOULD GO on leave and forget to take along some small but essential item, such as a toothbrush, chances are you'll find an inexpensive substitute at any corner drug store. If, however, a Seabee outfit should forget the hacksaw blades while on deployment, it might be in a real pack of trouble.

While on deployment, Mobile Construction Battalions are often far from normal supply sources. If small items such as paintbrushes or 10-penny nails are left behind, a heavy operating schedule could slow to a walk or come to a grinding halt even in a can-do outfit.

On the other hand, a battalion might take along 10 drill presses, then discover that five were quite enough. Perhaps also, the MCB might carry with it large quantities of old, beaten-up tools of no use whatever for a specific operation.

To avoid these twin headaches, the Chief of Naval Operations has provided the MCBs with a "purified" equipment and allowance list called the P25A. The list shows the kinds and amounts of tools and equipment any battalion should need to carry out a general construction program for 180 days under combat conditions.

The P25A gear is handled efficiently by COMCBPAC in two parts:

IN THE BOOKS—MCB 11 checks stock against ComCBPac allowance. *Right:* One of 3000 line items is inspected.





• General equipment common to all battalions.

• Items not normally required, but supplied by COMCBPAC if needed.

Closely linked to the P25A concept is SOAP, or the Supply Overhaul Availability Program, an inventory of part 1 of the COMCBPAC allowance. SOAP was introduced at the CB Center in Port Hueneme, Calif., in January 1963.

IN GENERAL, the SOAP process involves laying out all battalion gear on deck, making up kits which can be hand-carried, then backing up the kits with portable tool rooms. Here's how the process works, and what it means:

Laying out the gear before deployment serves several purposes. It gives the Seabees a good look at the tools and equipment available to them before deployment. By tearing down and building up their own supplies, they know exactly what's on hand to do the job.

It is also a good way of spotting items in need of repair or replacement, and items in excess of allowance. Only items in serviceable shape, and within requirements, are carried on deployment.

A complete inventory is then made of every file, hammer handle, socket wrench, flash bulb and what-not,



GETTING SET — Tools are cleaned and put through preservation process. *Below:* Gear is laid out for inventory.





PACKAGE DEAL—Supplies are packed in portable tool rooms for deployment.

using appropriate stock numbers. Record cards are made, listing each item by number and location.

Next, kits containing items on the COMCBPAC allowance list are made. The kits may contain carpenter tools, plumbing equipment, drafting devices and supplies, or even a complete barber shop. Though the kits may contain a wide variety of different items, they have at least one thing in common—all can be picked up and carried by two men, insuring Seabee mobility.

A simplified tool room system is used to back up the kits. This involves the use of cardboard boxes of various sizes, each containing a different item. The boxes, when filled, fit into specific spots in a large pack-out box. On deployment, the pack-out lids can be removed and the Seabees have a ready-for-use tool room. Aside from added convenience, this method of packing has increased the volume of gear that can be hauled.

BEFORE DEPLOYMENT, each MCB goes through the P25A/SOAP process. Returning from deployment, the battalion has a two-week de-SOAPing.

Even though the P25A/SOAP is looked upon as a "dry run" technique, it has met with enthusiastic acceptance during the past year. It is still under constant review. For example, battalion commanders have been asked to comment on the value of items in the P25A allowance. If something of value is not included, the listing may be revised. At the same time, COMCBPAC wants to know if an item is completely worthless.

In addition, the new procedure furnishes CBPAC with a guide for budget requirements. For example, the standard allowance listings give the Force a base from which requests for funds can be initiated. And, if deficiencies are uncovered, the system makes it easy to pinpoint the cost of bringing a battalion up to snuff.

All this may be a far cry from the traditional "pack rat" concept associated with MCBs, but the Seabees themselves welcome the chance to be self-sufficient while on deployment. Through the P25A and SOAP procedures, the battalions know at all times exactly what's available. What's more, they have quick, easy access to any item. —Marie Levi.

SOAP AT WORK — Supply Overhaul Availability Program gives the SeaBees what they need out on the job.







THE JOB — Seabee of MCB Ten surveys crater left after bombing. *Right:* Crater is being filled with debris.

Bombed Out, But Back in Action

Navy pilots aren't specifically trained to blow up U. S. Navy airfields—but they can. And they did.

The Seabees, on the other hand, are trained to patch up airfields, so they came in handy after a flight of A4C *Skyhawks* had pockmarked the landing strip of a deserted Navy airfield with high explosive bombs.

Bombing of the abandoned air strip near Holtville, Calif., was no accident. It was a test of how effectively Navy pilots could tear up the place and how well—and how quickly—the Seabees could put it back together.

A few minutes after the attack had ceased and the offending *Skyhawks* had disappeared over the horizon, a detachment of 35 Seabees went into action. First, the airfield was inspected to make certain there were no unexploded bombs. Next came a pre-repair survey party to have a look at the damage and plan for the repairs.

Before work began, the Seabees cleaned up the shrapnel and debris from the runway and the craters. Then came the heavy equipment; front end loaders, dump trucks, motor graders, compaction rollers and a small bulldozer.

The craters were shaped for patching and partially filled with subgrade material. Fill was added to the holes and, layer by layer, packed down until the level of the fill was only a few inches below the surrounding runway.

Each crater was then surfaced in one of two ways. On some craters hot asphaltic concrete was applied, rolled, and allowed to cure. Other craters were surfaced with a new aluminum matting, developed recently by the Marine Corps for use as a runway.

Just two days after the *Skyhawks* had bombed the runway, the holes had been patched and a towed trailer, weighted to simulate F4B aircraft, was pulled across the runway. All patches met the specifications.

The Seabees loaded their gear in trucks and returned to MCB 10, at Port Hueneme, Calif.



NEXT — Select fill is added and after watering down hot asphalt is applied.



FINISHING TOUCH — Aluminum matting is used for a wear surface and (left) weighted trailer tests the surface.





Bainbridge–Navy's Own Prep

IF YOU FEEL you've let opportunity pass you by, perhaps this is because you believe that opportunity knocks only once. But don't be deceived. One measly little knock cannot serve as the exclusive agent for all the opportunities available in many fields today.

Here's an illustration: You're young, and eager to get ahead. As just one of the many extraordinary opportunities available to you as an enlisted man, how would you like to be enrolled as a midshipman in the United States Naval Academy, and eventually graduate with a degree, a commission, and a new lease on life?

If you can meet the age, academic and physical standards—then you can be very much in the running. The Navy, through the facilities of the Navy Preparatory School in Bainbridge, Md., will do all it can to help you.

If you're beyond the age limit, this information may apply to a shipmate in your division, or to your brother—or to your son. It's a wonderful opportunity.

Historically speaking, for many years enlisted men who possessed officer potential had no access to the Academy. Then, during the administration of President Woodrow Wilson, the Secretary of the Navy was empowered to nominate a limited number of qualified enlisted men of the Navy and Marine Corps.

The first quota was very small—15 appointments. But it was not filled because very few men could pass the Academy entrance examinations without some formal preparation. So, in December 1915, the first Naval Academy Preparatory class was formed at the Naval Training Station, Newport, R. I. There were 11 students.

In subsequent years the number of appointments available has been increased. Keeping pace, Naval Preparatory Schools were operated at Norfolk, Va.; Bainbridge, Md.; San Francisco and San Diego, Calif. During the Korean War the school was returned to Bainbridge Naval Training Center as a component of the Service School Command. Here it occupies the area and buildings of a



former private school for boys.

As you probably know, you must receive an appointment before you can enter the Naval Academy. There are various ways an individual can be appointed, but the way that interests you is known by law as Title 10 U. S. Code 6954. This is the law that permits the Secretary of the Navy to appoint, each year, 160 enlisted men of the Regular Navy and Marine Corps.

WHAT SORT of man is selected for this pipeline to a career as an officer? Typically, your high school grades were average or better, and your ability is above average.

You are a U. S. citizen, of such age that you will not have passed your 21st birthday on 1 July of the year in which you are admitted to the Naval Academy. You generally would be a high school graduate or the service-accepted equivalent, and have a combined GCT-ARI score of 118 or better (the high school credit requirement will be explained in more detail later in this story).

You must be unmarried and able to pass the required physical examination.

Beyond that, you must be *strongly motivated toward a career as an officer in the Navy,* have a good record, and receive the endorsement and recommendation of your commanding officer.

These are not, by reasonable standards, what you can call forbidding requirements—nor easy ones.

THE BUREAU of Naval Personnel issues BuPers Notice 1531 each year. This describes the procedures by which commanding officers nominate personnel for the Naval Preparatory School. This nomination for NPS is your first step. At NPS you become a candidate for appointment to the Naval Academy under the Secretary of the Navy's quota.

A paragraph setting forth the mission of the Naval Academy is included:

"To develop midshipmen morally, mentally and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to provide graduates who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship and government."

Here's where the motivation factor comes to bear. There is a screening process which enables the Navy to select only those candidates who appear capable of living up to this mission. Only if you are a strongly motivated volunteer will you stand a chance.

The wheels are set into motion when you submit a special request to your commanding officer asking permission to be considered as an applicant for admission to the Naval Preparatory School.

Now is the time to get started, if you're interested in being considered this year.

Then you will:

- Prepare a NavPers Form 2928, *Application for Assignment to Naval Preparatory School.*
- Receive a physical examination, and complete Standard Forms 88 and 89.

Your commanding officer will appoint a board of three officers who will interview you and the other applicants. Then your CO will personally interview you, and decide whether or not you will be recommended for the program. His decision will be based on whatever evidence he has of your good moral character, motivation for a career officer status in the Navy, and your academic potential.

- Then, on 16 April, you will take

School

the Fleet screening examination. This is designed to determine your capabilities in the fields of mathematics (algebra and plane geometry), English, and physics or chemistry (you may elect to be examined in either physics or chemistry, or both).

Your application and your test scores are closely scrutinized at the Prep School. A selection board—made up of the commanding officer, the academic director and other members of the faculty at the Prep School—screens all the applications, considering your high school transcript first and your Fleet screening examination scores second.

If you get past this stage, then all other information, including the report from your preliminary physical examination, is considered. If the selection board members are doubtful about borderline factors, they check with Academy officials to determine whether or not the candidate can still qualify.

There is a limit to the Prep School's facilities, so if you are still in the running after these first stages of elimination, your qualifications will be compared with those of other applicants to determine where you stand. Your records then undergo further screening at the Naval Academy before final acceptance. About 350 men will finally be chosen.

THEN THE BIG DAY arrives. Your commanding officer is notified sometime in July that you have been selected for admission to NPS, and your transfer to Bainbridge takes place shortly thereafter. You soon become a NAPSter, and part of a tradition.

As you begin settling in, you learn that the military organization of NPS is similar to that of the Naval Academy. The student brigade (called battalion at NPS) is divided into three companies of four sections each, with about 25 men in each section.

First, you will be assigned to a section, and a section leader will be appointed on the basis of seniority.

Depending on which company you are in, your new home will be either Madison House, Harrison House or Tome Inn. Generally you will share a room with one other student, but if you become a student company commander you will most likely have a private room.



OFF THEY GO—Company of NPS students march to classes held in Tome Hall.

The section leaders are responsible to the student company commander, who is assisted in his duties by a student executive officer and adjutant.

The company commanders are further responsible to the student battalion commander, appointed on the basis of seniority and ability.

The NPS battalion is under the direct supervision of the battalion officer, and each company is supervised by a company officer who reports to the battalion officer. These positions are held by commissioned officers who are regular members of the school staff.

The positions of student leadership within the battalion are periodically rotated among the students to develop traits of leadership.

The sections and companies com-

NAVAL PREP School teaches subjects which are most important at Academy.





HOOTENANNY—NPS students relax with a song between study and classes.

pete against each other in the military and intramural aspects of their daily routine. At the close of each marking period a color company is named for the period, and at the end of the year the outstanding company is named color company of the year.

YOU WILL MEET the school's commanding officer, who is currently LCDR Peter A. Stark, Jr., USN. LCDR Stark is most qualified for this position. He is familiar with the operation of NPS because he graduated from there himself in 1948, entered the Academy and graduated with a commission and a Bachelor's degree in 1952.

His naval career probably began something like your own—he joined on a regular four-year enlistment in 1946 and was in Class "A" metalsmith school when he applied for the program.

Just before receiving his present command, LCDR Stark was executive officer of one of the Navy's guided missile ships — USS *Hoel* (DDG 813). All of this is to point out that it *does* happen.

LCDR Stark will probably start by telling you that he hopes you're at NPS because you really *want* to be there; that if you don't really feel that the life of an officer in the U. S. Navy is the life for you, then you will be wasting a lot of peoples' time, including your own.

He will tell you that you are at NPS to prepare yourself for entrance into the Academy; to receive a good academic background, so you will be able to remain in the Academy once you get there; and also to prove yourself capable in other areas. He may also remind you that now is the time to form good study habits.

He will explain that the course of study you are about to begin is an intensive review—at an accelerated pace—of a secondary school curriculum in all those subjects which are most important at the Academy.

AND YOU WILL LEARN other things that you must know, and accept, if you are to be successful at NPS. For instance:

You are not in competition with the other students at the school, but you are in competition with academic scales. The standards are absolute. You must reach a certain level of performance, and unless you can do this, you will be out of luck.

On the other hand, very few people ever fail the course at NPS. Most of those who leave do so for other reasons. It is important that you understand you will never be forced to remain at NPS. The fences are low enough so you can jump them at any time. Anyone who has a change of heart can voluntarily withdraw. Remember what was said about wasting a lot of peoples' time?

But right now you're saying to yourself, "If I ever managed to get into the school I certainly wouldn't drop out." Assuredly almost every young man who enters NPS probably feels the same way. But, many eventually do have a change of heart for the following reasons:

• The Naval Academy, while it is considered one of the finest schools in our country, is a highly specialized school—as is any service academy. Hand in hand with its engineering curriculum, its program is designed primarily to create capable commissioned officers for the Navy. This is the *hard* way to earn a commission. It differs from the usual college education in its ultimate objectives. If you are looking for a liberal arts degree, this is not for you.

• You must remain unmarried until graduation from the Naval Academy, and Susie Bell must understand this. Much of the attrition at NPS is the result of wedding bells ringing for students who are so eager to begin their careers as husbands that they are willing to forego careers as naval officers.

• You must be entirely free from all financial obligations. As CDR A. D. Garvin, USN, Commanding Officer of the Schools Command at Bainbridge puts it, "You cannot even support a parakeet."

You don't need a great deal of money at the Prep School but it is strictly a "break even" proposition. You must cancel all recurring expenses — magazine subscriptions, book - of - the-month clubs, record clubs, and all other expenses of this nature. You will not be able to manage a contribution to your family's income. If you have an auto, you must either get rid of it or leave it at home. You cannot work during your free time; the only moonlighting you do at Prep School and the Academy is studying.

• You must get used to taking orders. A typical class includes one E-5, seven or eight E-4s and the rest non-rated. For this reason, small differences in rank mean considerable difference in authority. You must learn to accept authority for authority's sake, and if you cannot, you will never make the grade.

• You must become accustomed to a special set of regulations *besides* the Uniform Code of Military Justice. You can come under fire for offenses at NPS which are not specified as offenses anywhere else in the Navy. Because you are a midshipman candidate you must display strong personal honor and integrity.

THE QUOTA of 160 men per year still stands. It *can* be filled, but

it doesn't *have* to be. It's up to you.

Daily Routine

Next you will be concerned with your daily routine. It will look like this:

0600 *Reveille*
0630-0720 *Breakfast*
0730 *Morning quarters*
0810 *Commence classes*
(There are four morning periods of 50 minutes each.)
1150 *Noon quarters*
1200-1235 *Lunch*
1300 *Extra instruction* (for students requiring it)
1345-1530 *Afternoon classes* (two periods)
1530-1715 *Intramural sports* and varsity team practice
(Everybody must participate in one or the other)
1730-1830 *Evening meal*
1930-2130 *Evening study*
2200 *Taps*

This is the Monday through Friday schedule. On Saturday morning there is usually barracks inspection or personnel inspection. Or the school may arrange for a speaker to address the student body on such subjects as finances, admission procedures of the Academy and related topics.

Occasionally a group of Academy midshipmen, usually first and second classmen (and former NAPSters), will visit and have brainstorming sessions with the students, and pass on much useful information, advice and encouragement.

From September to March, the six daily 50-minute periods are devoted to the following subjects: Vocabulary and reading, rhetoric, physics, algebra, plane geometry and study hall. Character education is given one period a week. Physics lab is given once a week in place of rhetoric.

There are varsity sports teams in football, cross-country, swimming, wrestling, track, tennis and lacrosse. These compete with teams from junior colleges, state teachers' colleges and the Naval Academy plebes.

The climax of your studies at NPS comes on a Saturday in March after the fourth marking period. This is when the entire student body takes the College Entrance Examination Board exams, the results of which are used to determine your final acceptance to the Academy.

Saturday morning is spent on the scholastic aptitude tests in the verbal and math categories, and the afternoon is devoted to English and intermediate math achievement.



NOW HEAR THIS—Students pay close attention to teacher in physics class.

Then the seemingly interminable six- to eight-week waiting period begins—waiting to learn if you have been accepted and will receive an appointment to the Naval Academy.

You don't pass the time idly. NPS then throws the whole learning process into high gear, shifts the content and emphasis of the curriculum, and pounds you with a post-exam course of study until May. This is to give you a running start in your plebe year at the Academy.

You begin a concentrated writing course, change from plane geometry to trigonometry, begin chemistry and mechanical drawing, and continue with physics and algebra.

As you can see, the courses are pretty stiff. This is why you should have a good secondary school background before applying. The school is not intended to complete your high school education, but is intended to be a means of providing a review of the work which should have been mastered before.

IT IS ESSENTIAL that you have an acceptable secondary school certificate, which should include as many as possible of the following studies:

- Three years of mathematics (since the elements of advanced algebra, geometry and trigonometry are essential to the Naval Academy course).
- Three years of English.
- Two years of a foreign language, preferably modern.
- One year of chemistry, with a year of physics in addition being desirable.

If you should be accepted at Prep School without this background (as has occurred with only a few candidates), you will find the work very difficult, and will have to make correspondingly greater efforts to grasp the material. But the Prep School course, if satisfactorily completed, will provide you with the following credits to be added to your high school transcript:

- One unit of English.
- One unit of algebra.
- One-half unit of trigonometry.
- One unit of geometry.
- One unit of physics.

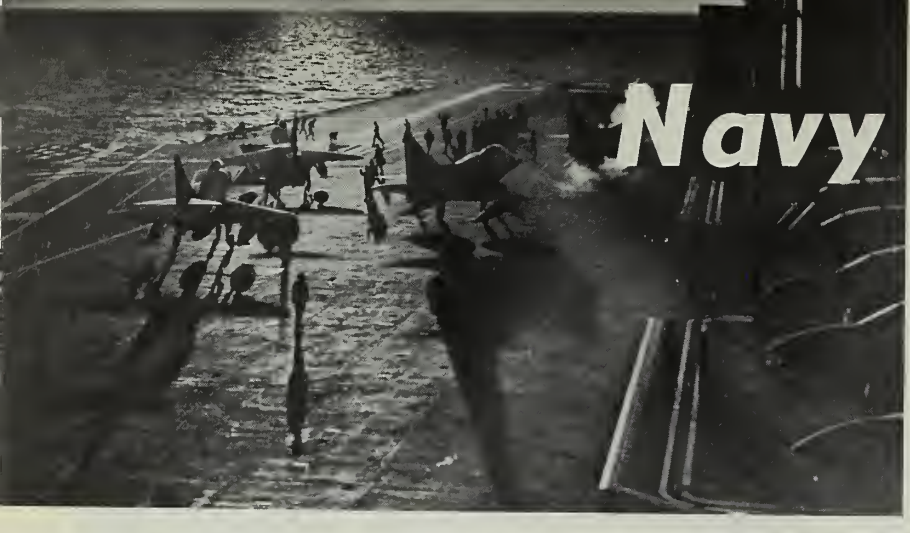
By this time you look around you—and over the past nine months. It is May, and everyone at school is busily preparing for graduation ceremonies.

You are aware that your class has decreased considerably in size from the 350 you began with. Some of the fellows just couldn't make the whole stretch, for physical or other reasons, and the weeding-out process continued through the year.

But you are also aware that your chances are better than ever. You have received an excellent review of your high school work, and you have the added advantage of becoming accustomed to the rigors of the Naval Academy in the past nine months.

Now the real work begins, but you are prepared. After a brief leave, you will report to Annapolis in late June as a midshipman.

Thus you have seen how it can happen—and does happen; how you can answer opportunity's second knock. —Bill Howard, JO1, USN.



SECNAV SUMMARY —

Navy Scenario



When Secretary of the Navy Paul H. Nitze assumed the responsibilities of his new duties with the Naval Establishment, he brought with him a background of long experience as a career government official. He has served in various capacities under five U. S. presidents and, before taking over as Secretary of the Navy, was Assistant Secretary of Defense for International Security Affairs.

One of his early actions as Secretary of the Navy was to address the officers of the U. S. Navy and Marine Corps assigned to headquarters duty in the nation's capital.

What are the challenges to the Navy in the rest of this decade and the 1970s? What are the problems and what are the solutions? In the following extracts of his address, ALL HANDS *publishes the straightforward and realistic remarks of our new Secretary of the Navy.*

I WOULD LIKE TO outline for you what I consider to be the great strengths and opportunities of the Navy and the Marine Corps, now and in the future. These comments are largely my own preliminary reflections. However, I have discussed them with the Chief of Naval Operations and the Commandant of the Marine Corps, and find my views are in general agreement with their own.

I hold that the Navy and Marine Corps are going places. Some may say why do you believe this? Aren't we getting a smaller number of ships, fewer people and less support funds in the '65 budget than we said we needed? Aren't there rumors of fund cuts, base reductions and economy measures that will degrade our posture?

Some of these things may have that effect—some may not, but the fact remains that today, we do have a larger, more modern and more powerful Navy and Marine Corps than ever before in peace time.

My judgment concerning the future is based upon a consideration of the development within the world political scene and in the technology of war. It is reinforced by my confidence in the historically demonstrated capability of the Navy and Marine Corps leaders to capitalize on trends, and to adapt the versatility of seapower to these trends.

LET ME BRIEFLY DISCUSS these developments and my preliminary view of our role in them.

The exploding technology of this age, especially in the field of thermonuclear weapons, missiles, their platforms and controls, is giving each of the super-powers an ever-increasing capability to damage the civil population and the industrial base of the other.

These developments have taken





of the 1960's and 1970's

from our homeland base the full protective shield which our control of the seas used to provide. Yet at the same time, these unpleasant realities have made *the use of the seas, either for the prevention or the waging of central war—intercontinental nuclear war—more important than ever before in our history.*

The only strategic weapons systems which we estimate is completely invulnerable against surprise attack, now and in the foreseeable future, is our deployed *Polaris* system.

Polaris, A Proved Deterrent

THE TESTED and proven reliability of the *Polaris* missile system has made it possible to ensure that a high percentage of the missiles of this invulnerable second strike force will be able to reach their targets in an aggressor's homeland. Furthermore, the added range provided by the A3 missile will open up the entire Eurasian continent to this lethal deterrent.

By 1970 we will have 41 *Polaris* submarines, with 656 secure and reliable missiles. The majority will always be deployed, on an alert status, ready to strike if needed.

Modern technology has reduced the oceans to the point that our continent is vulnerable to direct attack. We can be thankful, however, that these very oceans provided the medium in which the deterrent force of our *Polaris* weapons system could be deployed, under the genius of our Navy's forward-mindedness, technical talent, and superior management. This, together with the missiles and bombers of the Strategic Air Command, provides, and increasingly in the future, will provide the United States with a very formidable deterrent indeed.



SecNav Paul H. Nitze

Exploring Multilateral Force

THESE DEVELOPMENTS in strategic weapons systems, together with other facts of international life, are increasing the dependence of free sovereign states upon one another.

The expense of thermonuclear missile systems precludes nations, other than the two super-powers, from building strategic forces of full deterrent force. This means that other free countries, in varying degrees, must base their confidence in their continued sovereignty upon the strategic weapons systems of the United States. For some of our European allies, it is understandable that this is not a wholly satisfactory relationship. They are demanding added participation in strategic systems dedicated particularly to the defense of Europe.

To achieve the multilateral arrangements, which seem to provide the most feasible basis for bridging this political problem, thought has turned (increasingly) to multilateral deterrent forces on the high seas.

It is United States policy to support the creation of a multilateral missile fleet. The competent naval authorities believe that such a force would be militarily effective—a judgment in which the Secretary of Defense and I concur.

Current allied discussions of this concept, in Paris and Washington, are making good progress. It is too early to predict their final outcome, but we of the Navy should take pride in the fact that we are being called upon to explore this possible solution, and that we are in our medium. We are in the vanguard of this politically important exploration. We should welcome its military-political challenges.

There is another aspect of developments in strategic weaponry which has added import to our sea service. The increasingly mortal nature of the destruction which each side can wreak upon the other in the future makes resort to thermonuclear war, except in the last resort, increasingly irrational.

This has added to the importance of the non-central war weapons systems, because under the umbrella of our main deterrent, they are likely to be the cutting edge of our usable power.

Fast Carrier Striking Force

THE GREAT CHALLENGE to us all lies in the exploitation of the politically usable seapower of our Navy and







GUIDED MISSILES and atomic power are a potent deterrent to aggression.

Marine Corps in the years ahead.

First among these politically usable systems is the fast carrier striking force.

Its primary role has always been that of limited war. The secondary role of this weapons system is now moving away from that of a major component of our alert strategic forces for the initial phase of a central war. We can, however, expect that it will continue indefinitely, in its role as an important strategic reserve for such a war.

More importantly, while retaining reserve strategic operational capability, the inherent flexibility of our attack carrier forces enables us to provide readily available deployed tactical aircraft, capable of participating in either tactical nuclear or conventional war.

There is a growing realization that the political invulnerability of attack carrier forces is vital to our success in supporting foreign policy in all phases of peace and war. This realization also recognizes the unique capability of attack carrier forces to concentrate enough tactical air power at the right place, at the right time, to deter or win limited wars.

Of course, this capability depends upon our having adequate numbers to cover the unexpected, as well as the expected situations.

By the end of this decade, assuming that the CVA started this year is in the Fleet by then, the Navy will have only three of the smaller *Essex* class attack carriers, plus three *Midway* class and nine *Forrestal* class or better. *As a result, the Navy will then have far more carrier combat capability than we were able to put to sea in 1961.*

Carrier Warfare in 1970s

OUR PRESENT PLANS indicate that the Navy will, by 1970, have replaced numerous A4B, A4C and the A4E aircraft. These aircraft, and carriers, will give us a marked increase in our striking power, in weight of ordnance deliverable and in range, over the 1961 figures. Moreover, these aircraft will, by 1970, be using modern conventional ordnance. The effectiveness of those using *Walleye*, and other modern ordnance, will have increased measurably in comparison with 1961.

I can report to you that the approvals of the concepts involved in these aspects of carrier warfare represent forward strides in understanding between the office of the Secretary of Defense and the Department of the Navy.

A study of the Sea Based Carrier Strike Force of the future has been conducted by the staff of the Chief of Naval Operations. Thereby it was established that the carrier striking force would retain an important mission in any limited war of the '70s, and that there are distinct advantages to its use in certain contingencies in which neither tactical air, permanently based overseas, nor CASAF (Composite Air Strike Assault Force) wings could be used as well.

I might add that close working liaison with the personnel of the office of the Secretary of Defense made it possible for us to reach a mutual understanding in our thinking, and particularly in terminology.

It was a follow-on implementing study conducted by the Chief of the Bureau of Naval Weapons, under the guidance of the staff of the Chief of Naval Operations, which analyzed the specific requirements for a VAL (light attack plane) to support the sea-based carrier strike force of the '70s, and which certified the feasibility of its construction. Again, working liaison with the office of the Secretary of Defense was not only beneficial, but essential.

A third study, equally significant for the future carrier striking force, was the Navy's Conventional Aviation Ordnance Study.

Each of these studies represents a distinct success for the Navy, operating as an integral member of the Defense Team. Each has demonstrated that the Secretary of Defense is responsive to a well justified requirement.

Each has added a new dimension to the capability of the carrier weapons system.

Nuclear Propulsion

IT IS TRUE THAT there is another aspect of the carrier weapons system still to be evaluated. The Navy view, as you know, was that authority and appropriations should have been requested from the Congress, so that CVA 67, and future carriers, as well, could be provided with nuclear propulsion.

As a newcomer to the evaluation of nuclear propulsion, I have found no one in disagreement with the proposition that a given nuclear propelled ship is superior to a similar ship with conventional propulsion, or that the former is more expensive. I have found, also, that the issue of how best to optimize effectiveness at a given level of cost, or alternatively, how to minimize cost at a given level of effectiveness for carrier task forces, including escorts and replenishment ships, has complexities. We find ourselves trying to equate greater numbers of one type to fewer numbers of what are usually a more expensive type.

Our real desire is to benefit from the advantages which nuclear power might afford us, and not to offset

this benefit by losing the advantages which come from adequate numbers.

Needs in Field of Anti-Air Warfare

THERE IS AN ADDITIONAL complication in resolving this question of nuclear power.

It emanates from the fact that the majority of informed opinion doubts that the advance *Typhon* AAW System, which it was planned to install in the larger DDs—probably nuclear powered — would fully meet our needs. This doubt leaves us without assurance of a sophisticated advanced AAW suit for the combat support ships of the 70s. Intensive work is going on to develop a system which will give us that important assurance.

In the meantime, there is necessarily uncertainty as to the size of the fast escort ship we will desire to build when the AAW question is resolved. Without the answer to that question we risk making the wrong decision by building a small number of nuclear escorts large enough to house present nuclear plants, but at a cost so large as to preclude providing adequate numbers of AAW and ASW platforms.

Faced with these several imponderables, which could not be solved immediately, Admiral McDonald and I both believed that it was essential that we go forward, and build CVA 67 with conventional power, rather than to urge a further delay in the construction of this ship.

Nuclear Power in the Future Navy

I AM NOT SUGGESTING that our past positions with regard to nuclear power should necessarily be changed. I happen to believe that, *eventually, our major combatant ships will be nuclear powered.* What I *am* suggesting is that we need to do more hard work on top of the *very* hard work that has already been done.

We need to do additional research on the feasibility of reducing the costs of our nuclear power plants, large and small, as well as that of the nuclear fuel, or cores, for these plants.

Perhaps, even more importantly, we need to work diligently with our opposite numbers in the office of the Secretary of Defense to answer their remaining questions, to identify agreed facts and opinions and to translate those advantages, which your military experience has trained you to recognize, into terms which OSD civilian leadership can accept.



NAVY-MARINE team produces versatile fast-moving amphibious assault force.

I have great confidence that the analytical techniques which have worked so well in resolving the other differences, and achieving the understandings on other aspects of the carrier weapons system, will produce a common approach in the future, between the Department of the Navy and the office of the Secretary of Defense, on the question of nuclear power.

Future Amphibious Capabilities

IN A TYPICAL SCENARIO of the '70s, after the carrier striking force has reduced the potential of the enemy air threat to manageable proportions, greatly improved amphibious forces will be capable of moving in to seize and consolidate the necessary land areas.

Early in the next decade our Navy will have achieved the capability of lifting and landing the assault echelons of more than one entire Division/Wing Team at the remarkable rate of 20 knots. The remainder will necessarily be lifted in older and slower shipping. However, before the mid-1970s, we will have programed the capability of nearly twice that number. Here is an area in which the Navy and the Marine Corps, and the Defense Department, are in full agreement. Here is an area in which we have the know-how to build the ships and aircraft we need.

Navy-Marine Corps Teamwork

THE CHALLENGE to the Navy-Marine Corps team lies in the development of improved techniques for capitalizing on this great increase in strategic mobility. To keep pace with this improvement, along with parallel developments in weaponry, command and control systems, and tactical mobility means, priority attention should be given to the techniques involved in embarkation and loading, and in the conduct and control of the ship-to-shore movement.

By such across-the-board advances in our amphibious assault capability, we will be able to demonstrate the broad versatility and applicability of these forces, and thus enhance their deterrent factor.

I hardly need mention that the troops to be lifted at the rate of 20 knots will almost invariably consist of the fighting men of the United States Marine Corps, landing either in the conventional manner perfected over the past 30 years, or by vertical envelopment, a means first tested in the post-World War II era.

I have spent many hours being briefed on matters of concern to the Department of the Navy. I have been impressed by the extent to which the Marine Corps has its problems in hand.

The Marine Corps historically has demonstrated an unexcelled capability to remain ahead of its civilian management in discovering the solution to its problems. I expect to see this top performance continue.



ADM D. L. McDonald, CNO, visits CO of Hunley.

I TURN NOW TO TWO areas in which there is almost all challenge and, as yet, no adequate answer—AAW and ASW.

I mentioned the unlikely prospect that *Typhon* in its present concept would be the answer to the threat of the '70s. The three "Ts," (*Tartar, Terrier* and *Talos*) even with their current fixes, may be approaching marginal effectiveness by that decade. The F111B with its *Phoenix* Missile System should, by that time, have brought a substantial improvement in air-to-air defense.

But we do not have in sight, in surface ship weapons, an accompanying solution to the air and missile threat. This should not dishearten us. Rather it should stimulate us to more intensive effort and devotion of higher priority to the job.

The fact that our carrier forces have been found mandatory in the '70s carries with it a built-in urgency that we solve the air and missile threat to them, and to the other forces that will follow them.

Here again, in solving this problem, we must fight the constant battle to hold down costs, and to achieve simplicity of design, if we are to have sufficient ships to screen our wide-ranging forces. But the funds will be forthcoming when we clearly see the best line of approach to the solution.

Sub-Surface Sensors for ASW

THE SECOND AREA of formidable and continuing challenge is in the field of ASW. Here is a sector in which the entire spectrum of naval tools has a part to play.

Although some excellent, promising new ASW systems are just entering the Fleet, our air, surface, and fixed and mobile sub-surface sensors all need further improvement.

Of perhaps even greater importance is the need to tie together, more effectively, all that current and future sensors can do, through improved coordination, both tactical and strategic in nature.

This need for coordination of ASW systems, and for their improvement, implies that the closest form of management control over the entire ASW program is necessary. I have been pleased to find that the organization of the Navy has been improved in the direction of over-all ASW management. There is, however, a requirement for added emphasis and even better coordination and control in the future.

The Challenge of ASW

ABOVE AND BEYOND the question of management and improved ASW tools, there lies the broader matter of ASW philosophy. Much remains to be worked out in the years ahead.

How should we deal with the problem of resupply of the overseas area in which limited war is occurring?

Under what circumstances should we provide pre-stocking of supplies in critical areas?

How heavy should our emphasis on escort of convoys be?

How much should we think in terms of attrition of enemy submarines, in order to win the war at sea?

With improved ASW capabilities can we put more emphasis on killer submarines in barriers and hunter-killer carrier forces as the primary strategy, with less reliance on escort forces, or must we increase our escort capabilities?

Combat at Sea in the '70s

I HAVE THE VIEW that one of the more likely scenarios, in the '60s and '70s, is a war at sea, resulting from probing enemy aggression.

In such an event we should need, I think, to rely on ASW forces, across the spectrum.

Our SSNs and patrol aircraft squadrons would have to exact attrition from transiting submarines. Our hunter-killer forces would have to be used as the strategic forces of such a limited war, deployed in the open oceans against the weight of the submarine threat which had made the transit successfully.

But I would also visualize a vital dual role for escorts—to protect and convoy our merchant shipping, and also to kill enemy submarines attracted to the convoys.

It is not my purpose to try to proclaim a doctrine or a dogma. I am trying to suggest that in addition to the known problems in the management and hardware fields, all naval personnel should look forward with relish to the challenge in the field of ASW strategy and tactics. Here is an aspect of seapower peculiarly adapted to the concept of usable power.

There is room for the greatest amount of initiative and creativity in the ASW field. It is a mission which the Navy is likely at any time to be called upon to execute.

We have much to do in the field of study and analysis—to satisfy ourselves of the proper balance for our ASW programs, and also to satisfy the Secretary of Defense, the Director of the Bureau of the Budget, the President and the Congress, all of whom have not only a legitimate, but a statutory interest in these matters, that we are right.

The size of the threat, and the maritime nature of the Atlantic Alliance dictate that the Navy be supported to the fullest in this field. But we have to find, and to prove, the intelligent balance in order to win support for our program.

As a matter of fact, it is reasonable to believe that, as the danger of escalation to the use of nuclear weapons in any war in Europe increases, this government will give increasing attention to requirements for a war at sea with a concomitant increase in the share of the defense budget going to these forces.

Structure of the Military Organization

RECENTLY THERE HAVE been press reports indicating considerable interest in the significance of, and reasons for, a series of organizational changes in the command structure of the Defense Department. My own view of these is that we must consider them in the mainstream of the evolutionary change that has been taking place since World War II.

I do not believe that it is necessary for me to review for you the history of the creation of the Defense Department. Nor do I need recall the

fact that the Service Chiefs have been assigned a separate responsibility as members of the Joint Chiefs of Staff, where they are joined by a Chairman and by the Commandant of the Marine Corps, who participates when he feels that the subject is one of particular interest to the Marines.

In more recent years, joint commands have evolved which have required retailoring, reemphasis, and reorganization, as political or military changes have made it wise to do so.

We all know, of course, that CINCSTRIKE was initially created for the purpose of integrating Air Force and Army forces, to provide joint training for their potential joint operations, anywhere in the world. This functional assignment has been criticized by some as a threat to the Navy, and especially to the Marine Corps. I have the view that it is rather a tribute to the extremely close integration achieved over the years by the Navy and the Marine Corps —and within the Marine Corps, of the Marine Divisions and the Marine Aircraft Wings.

I believe it seemed necessary to those in authority to create a system which would achieve a similar degree of close coordination and integration on the part of the other two services. It is my belief, further, that the Navy and Marine Corps will continue to lead the way in setting an example of close coordination.

The Navy and Marine Corps are now arranging to participate more closely in CINCSTRIKE's command organization, in order to improve our national readiness to employ the several Services with top performance in a crisis.

Navy's Blue Water Responsibilities

RECENTLY, AS YOU KNOW, the President approved a recommendation of the Secretary of Defense that CINCSTRIKE assume several responsibilities for the Middle East, Africa and South Asian areas. This assignment caused even greater concern among many of you than resulted from the initial creation of CINCSTRIKE. I should like to speak to that concern.

First, although this assignment gave him certain responsibilities in these land areas, his only over-water responsibilities are for two restricted bodies of water—the Red Sea and the Persian Gulf. A naval commander, COMIDEASTFORCE, was assigned to CINCSTRIKE, together with three naval units which have been maintained in that area for a very long period of time.

However, the entire ocean areas up to the shores of the continents and the subcontinents remain under the command of either CINCLANT *or* CINCPAC. The future responsibilities of these two blue water commanders, in the Indian Ocean area, are going to be challenging indeed.

Second, the Commander in Chief has made his decision. Our duty is clear—to support the decision fully and to continue to demonstrate the versatility and flexibility of our sea power in the Indian Ocean areas of CINCPAC and CINCLANT and in support of CINCSTRIKE responsibilities in the adjacent areas.

The Indian Ocean Challenge

TODAY, WE HAVE the challenge of determining whether it is feasible and possible to acquire base rights to support permanent or temporary deployment in that area. If it is possible, then we must learn what these facilities should be. We have the opportunity, and the associated problems, of establishing in conjunction with CINCSTRIKE and the State Department, a proper relationship between either a permanent or a temporary naval force in that area, and the countries adjacent.

There are evidences of a power vacuum in that section of the world. The mechanism in which the regional association and stability in this area may come about, based on the concept of mutual support, could well be through the stationing of a U. S. attack carrier task force and its supporting structure in the area.

I am keenly aware that the strengths and opportunities I have been discussing are of the sort to challenge high caliber personnel in the Navy and Marine Corps. I am mindful that to continue the high quality of these services—in order to continue to have the men of the type who have risen to the challenge in the past—requires continuing effort on the part of your Secretary of the Navy and your military leadership.

Military Pay and Housing

SO FAR, IN THIS report, I have not attempted to discuss one problem of major importance, which I know is paramount in nearly everyone's mind—the subjects of pay and military housing. This was done by design, as I do not believe that justice can be done to the subjects, if treated as part of an over-all discussion. However, I do want you to know that I do not think, for one moment, that we can rest our oars on the recent pay increase.



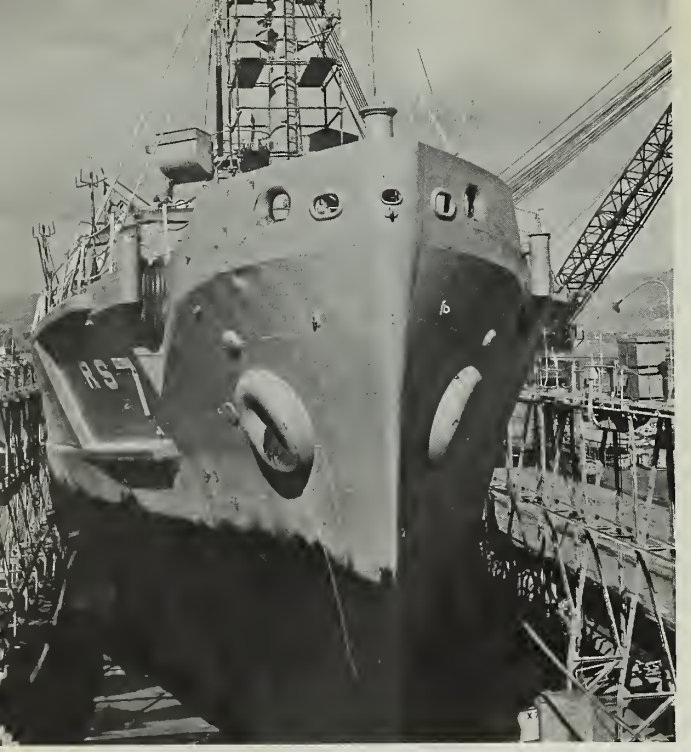
GEN W. M. Greene, Jr., Commandant USMC, reviews troops.

As a matter of fact, the President has approved the request of the Secretary of Defense that DOD be allowed to program a roughly three per cent increase in military pay in the fiscal year '65 budget as the first of a series of annual cost-of-living increases.

We must continue our efforts to ensure that Navy and Marine families are adequately housed, that they have proper medical attention, and that you have an equitable pay scale in comparison to other professions.

I intend to make it a major order of my business as Secretary of the Navy to see as many sailors and Marines, and the activities to which they are assigned, as I possibly can. I expect to make every effort to learn their hopes, and aspirations, and their problems in depth. When I have done so, I hope that I will be successful in translating these into feasible, intelligent, action programs.

It is also my intention to know, and know well, as many of your senior officers as possible. I am not just making a perfunctory statement when I tell you how deeply impressed I am with the caliber and dedication of those I have met thus far. Certainly there are no finer military statesmen, planners, and leaders in the world today than Admiral McDonald and General Greene.





THE SALVAGE ship *USS Grapple* (ARS 7) gets overhaul. *(Rt.) USS Bolster* (ARS 38) gets underway with barges in tow.



HARD HAT diver is helped into diving suit on board *USS Deliver* (ARS 23). *(Below) Deliver* heads to sea with string of four barges in tow.

The Workhorse Fleet

THE AUXILIARY FLEET of workhorse ships has many peculiar breeds. One is the ARS, whose peculiarity, or specialty, is salvage.

Built during the early 1940s to meet the special needs of World War II, the salvage ship has, over the years, demonstrated a willingness to deviate from duties to which her name implies she should limit herself. More than a few Navymen call the ARS a tug (the salvage ship can reputedly tow the largest ships afloat); others refer to her as "salvage and rescue vessel," or merely "rescue ship."

The typical *Escape* class ARS working today's Fleet was commissioned between 1942 and 1945. She is made of steel and is designed for offshore work. Her cruising range at an economical speed is approximately 14,000 miles. She has diesel electric power that drives 2440 shaft horsepower, and can move along at 15-knot speeds. She's 214 feet in length, measures 41 feet across the beam, and has a displacement of 1970 tons.

Her firepower consists of two twin 40-mm and three twin 20-mm antiaircraft guns. Her manpower is 85, which normally includes two officers and 21 enlisted men specially trained in salvage work.

And, of course, qualified divers are assigned to the ARS, which is equipped and ready to probe the depths for, then cut up, move, or refloat, virtually any sunken object.



MIDGET submarine is raised near Pearl Harbor by *USS Current* (ARS 22).



LETTERS TO THE EDITOR

UDT Insignia?

SIR: I have heard that UDT men are authorized a special breast insignia as are submariners and aviators. However, I have been unable to find a uniform shop that knows anything about it.

Is there such an insignia? If so, where can I buy one?—C. C. C., ENS, USNR.

• *The uniform shops were unable to sell you a UDT breast insignia because there isn't any.*

The Permanent Naval Uniform Board has considered proposals to authorize special uniform insignia for UDT, EOD and divers but has voted the proposals down each time primarily because of the Board's policy to limit such insignia to career specialists.

As you undoubtedly know, UDT enlisted men can wear certain diver's sleeve marks. All are eligible to wear their unit identification marks.—ED.

Sure, Chief, Fly that Pennant

SIR: I volunteered for service during World War II and served again during the Korean conflict. In both cases I was honorably discharged as a Chief Storekeeper.

As with most men who served with me, I am and always will be All Navy. I now plan to retire from my civilian job and am in the process of building a home on an island. I would like to have a flagpole in front of the house with a crossarm from which I want to fly a pennant.

I will have to design the pennant and am thinking of a chief's cap device in white on a blue field or perhaps a chief's rating badge in the same colors.

So far as I know there is no reason I cannot fly this pennant from the crossarm of my flagpole. Do you know of any?—S. W. B.

• *You won't get into trouble with the Navy Department because it has neither authority nor inclination to regulate the use of flags and pennants except within the Navy.*

So far as we know, there is no other authority that would object to your pennant. Fly it in good health.—ED.

What's a Spediat?

SIR: What exactly is SPEDIAT, and is it still used?

I say that it is not. SPEDIAT isn't mentioned in any publication today that I know of, including NavPers 15642, *Instructions for the Naval Manpower Information System, Part I (Active).*

I think SPEDIAT went out when NavPers 15642 was revised in 1961. Can you enlighten us?—L. B. S., YN1.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

• *SPEDIAT was an abbreviation for SPEcial DIAry Transcript. It was a form of message reporting that was used for supplementary diary reporting. The reports recorded sailing entries, plus information on personnel received or transferred at sea. But, as it was* supplementary *reporting, the SPEDIAT did not do away with the requirement for normal diary entries of the same information.*

You are right when you say that the term SPEDIAT was discontinued with the 1961 revision of NavPers 15642, Part I (Active). However, Art. 5.47 of that publication still provides for message reporting of this information.—ED.

BOW VIEW — The guided missile light cruiser *USS Oklahoma City* (CLG 5) slips through calm seas.



Light Sought on BuPers Manual

SIR: While we were preparing for the annual verification of Officer Service Records, we noticed several items in the *BuPers Manual* which, to us, seemed to need clarification. Perhaps some of them are discrepancies.

We would appreciate your opinion of the following items:

• Change No. 8 to the *BuPers Manual* makes it unnecessary to include the Annual Qualifications Questionnaire—Active Duty Officers (NavPers 549) in the service record. Since this form is no longer in effect, can we destroy old copies?

• Article B2207 of the manual requires copies in the service record of both NavPers 765 (Officer History Card) and NavPers 765A (Officer Preference and History Supplement). Since the institution of NavPers 2774, is NavPers 765A still in effect?

• Is DD Form 398 (Personal History Statement) required of all officers or only those who need security clearances or augmentation?

• What does the term "date commissioned" mean as used in NavPers 979 (Officer's Biography Sheet) and other forms. What meaning does it have to official records?

We recognize that date of rank of a man's first appointment to officer grade and his commission date may differ, and that both may differ from his date of acceptance.—J. E. K., LCDR, USN.

• *Here are the answers to your questions in the order you asked them:*

First—You may destroy copies of Form 549 if you wish, since their retention is no longer required. However, if you keep them, you may find them useful for reference.

Second—No. NavPers 765A is not in effect, and reference to it will be deleted from Article B-2207 in the next revision of the "BuPers Manual."

Third—A copy of DD 398 (Statement of Personal History) should be on file in each officer's service record. A worksheet copy is adequate but it should be complete.

Fourth—The term "date commissioned" is the date an officer's commission was signed by the Secretary of the Navy for the President. It is simply for record purposes and has no significance in determining date of rank and entitlement to pay. The date which counts is the date the officer's appointment is effective—which, unless stated otherwise, is the date the officer accepts his commission. Does this clear things up?—ED.



IN CALM SEAS — *USS Pine Island* (AV 12) heads for Galapagos Islands to provide training in advance based tender and seaplane operations.

What's With Telemen and RMs?

SIR: I have wondered why the teleman rating was discontinued even though teletypes have come in for greater and greater use. Can you shed any light?

Maybe you can also confirm or deny a rumor that is going around that the RM rating will be set up in specialized fields such as the AT and ET ratings.—L. C. M., RM2, USN.

• *Since you are an RM, we assume you know that the teleman and radioman ratings were combined. Many of the skills and much of the knowledge required of TEs were basic and were also required of RMs. Both the TE and RM ratings were so specialized before they were combined, that advancement from CPO to Warrant and LDO was extremely difficult.*

As for the rumor that the RM rating will be divided into special fields—this was proposed and under consideration, but the Permanent Board for Review of the Enlisted Rating Structure concluded the objectives of the proposal could be achieved through administrative action and did not recommend a split in the rating.

As things now stand, it looks as though the RM rating will remain just as it is.—ED.

Straight Shooters, Those Marionmen

SIR: My ordnance division in USS *Francis Marion* (APA 249) is the best in the Navy. We have won the gunnery "E" on all mounts and directors and before I transfer to the Fleet Reserve, I will see every mount and director with a hashmark.

But there is one way in which you may be able to help me.

My gun, director and radar crews have had me looking to see if they can wear the gunnery "E" on their uniforms. I've spent hours looking, the PNs and YNs have looked, but we can't find out anything about it. Can you help?—E. Q. C., GMG1, USN.

• *From the information in your letter it appears that your crews are qualified to wear the Navy "E." Here's what "Uniform Regulations" says: "Wearing of the Navy 'E' by personnel assigned to ships, shipboard stations or aircraft squadrons designated to receive proficiency awards may be authorized in accordance with instructions issued by the Chief of Naval Operations."*

Usually type commanders have the final say on who can wear the "E". We suggest that you contact your division officer concerning the matter.—ED.

Welder Looking for a Good Hot Spot

SIR: Last year I completed 20 weeks of welding school and was given an NEC 4945 (advanced welding). Since then I have heard that the Bureau of Naval Personnel has assumed the responsibility of assigning welders.

I have been in this ship for some time now and haven't touched a welding stinger except for practice. It seems that 20 weeks is a lot of time for me to spend learning something that I don't use—to say nothing of the expense incurred by the Navy in sending me to school.

Can I be reassigned to a ship that has some use for my skill?—K. M., SFM2, USN.

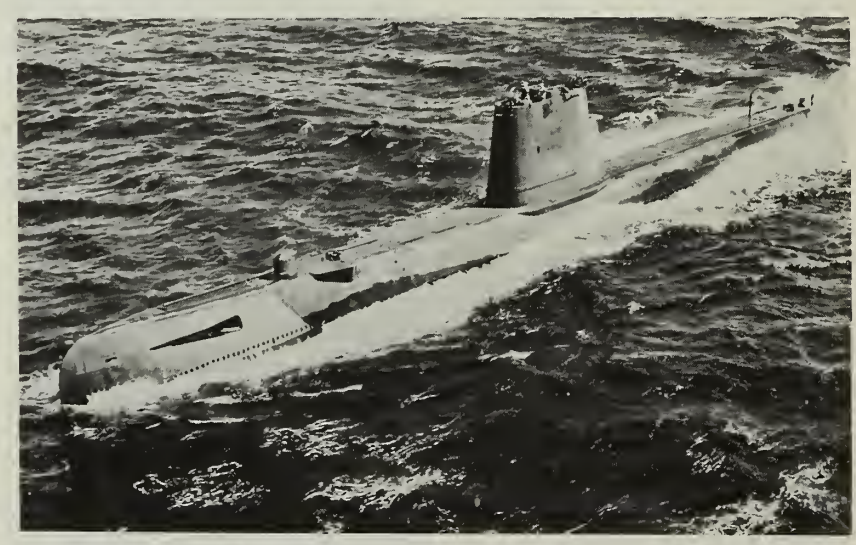
• *It does look as if you have been misassigned and, at the risk of using an old saw, we'll repeat that such things do sometimes happen in an organization as big as the Navy.*

The Bureau of Naval Personnel does not assign welders, as you had heard. In your case, EPDOPAC *would make the assignment, and your letter has been forwarded to see whether or not you can be reassigned to better advantage to yourself and the Navy.*

In the meantime, check your service record to see whether or not your correct NEC is listed. If it is not, have the error corrected. This could be the root of your trouble.—ED.

Trailer Allowance—Again

SIR: Would you kindly discuss the mileage allowance the Navy provides for moving house trailers upon permanent change of station? As I understand it, the government allows 36 cents per mile—and no more. Other trailer owners I've talked with insist the Navy pays all the extra expenses involved in moving a trailer from station, providing no dislocation allowance is paid.—L. J. B., BT1.



A NEW TOP — The plastic sail on *USS Gudgeon* (SS 567) makes less noise and requires less maintenance than its aluminum predecessor.



THE ATLANTIC Fleet's USS *Canberra* (CAG 2) is the only U. S. Navy cruiser with the name of a foreign capital.

• *Generally speaking, the government will pay as much as 36 cents per mile for transportation of your house trailer only if it's moved by a commercial transporter. If you haul the trailer yourself, the maximum allowance is 11 cents per mile. Here's how the laws concerning trailer allowances operate, as described in Chapters 10 of "Joint Travel Regulations" and "Navy Travel Instructions":*

At your request, the government will make arrangements for moving your trailer by commercial means between two authorized points, paying all costs related to pickup, transportation, and delivery at destination, up to the maximum of 36 cents per mile. But there's a hitch: You must agree to pay any extra expenses, such as storage charges or special handling costs. And, when you elect a trailer allowance, you are not entitled to a dislocation allowance or to transportation of baggage and household goods within the U. S., except when permanent change of station orders call for temporary duty en route.

In unusual cases, such as when no transportation officer is available, you may be permitted to make your own arrangements with a commercial transporter. Any claim for reimbursement must be substantiated with two copies of evidence of transportation, such as a bill, receipt, copy of bill of lading, etc. Such claims must be settled with the Navy Finance Center, Washington, D.C. —ED.

Oxygen Doesn't Go at 30 Feet Below

SIR: The October 1963 issue of ALL HANDS presents an excellent article on training tank qualifications. However, the article states that "two instructors with oxygen tanks strapped on their backs are at the 50-foot level . . ."

A well-trained Navy diver will tell you that pure oxygen should *never* be used on a dive below 30 feet. The highly toxic qualities of oxygen will, below that depth on a working dive, cause severe spasms and convulsions in short order.

The reference to "oxygen tanks" is a common error, but one which could get a novice diver in trouble. The proper term should be "compressed air tanks." And all divers should be made aware of the vast difference between oxygen and compressed air, with regard to diving. C. N. Seger, LTJG, USNR.

• *You are correct that the reference to "oxygen tanks" is misleading and might be misinterpreted. The proper term should have been "air cylinders," denoting that air is being used.*

The "U. S. Navy Diving Manual" (NavShips 250-538) gives us the official jargon: "The SCUBA gas supply consists of one or more high-pressure cylinders. They are usually steel, but may be aluminum alloy or special material. Open-circuit SCUBA cylinders are frequently called flasks or bottles."—ED.

Canberra Came from *Pittsburgh*

SIR: I would like to know if USS *Canberra* (CAG 2) was USS *Pittsburgh* before she was converted to a guided missile cruiser, or was she originally USS *Canberra* (CA 70)? Could you tell me?—M. H. K., SN, USN.

• USS *Canberra (CAG 2) was completely converted from Canberra (CA 70) in May 1956. However, when CA 70 was originally laid down, on 3 Sep 1941, she was named Pittsburgh. Before completion she was renamed Canberra in honor of the Australian cruiser sunk in the Battle of Savo Island early in World War II.*—ED.

Fleet Reservists in Naval Reserve?

SIR: A question frequently arises in my office which is never completely resolved because of individual interpretations of directives.

Here is a hypothetical situation to illustrate the problem. Suppose a CPO with 20 years of service goes into the Fleet Reserve. Can this CPO join a local Reserve unit, attend its meetings and make summer cruises with pay?

If he can do these things, can he receive his retainer pay in addition to his Naval Reserve pay, advance to E-8 and recompute his retainer pay?

I hope you can give me a clear-cut answer.—R. T. W., SOCS, USN.

• *Well now, Chief. This would be like having your cake and eating it, too.*

We suppose your hypothetical CPO could participate unofficially in a Naval Reserve training program, and his help would probably be a great asset to a Reserve unit. If he did so, however, it would be on a volunteer basis without orders, without pay and without any other credits.

When a man is in the Fleet Reserve, he is in a separate category from the Naval Reserve. Fleet Reservists are considered experienced personnel available for recall. As such, they are not authorized to join Naval Reserve units as bonafide members or perform active duty for training or advancement.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Elmore* (APA 42) — A reunion is scheduled for 1 August at the Holiday Inn, Salisbury, Md. For further details, write to Donald C. Messick, 102 Franklin St., Snow Hill, Md.

• USS *Holt* (DE 706)—A reunion for all hands is scheduled 19-21 June, at the Royal Orleans Hotel, New Orleans, La. Write to Bill Morgan, Frito-Lay, Inc., Exchange Bank Bldg., Dallas 35, Tex.

• USS *North Carolina* (BB 55) — This year's reunion is scheduled for 25-27 June, on board the ship at Wilmington, N. C. For details, write to Charles Paty, Jr., 2013 Midwood Pl., Charlotte 5, N. C.

• USS *South Dakota Veterans' Association of World War I*—The 44th annual reunion of the World War I crew will be held 4 April at the Mallory Hotel, Portland, Ore. For information, write to Roland A. Hall, 1724 S. E. Grand Ave., Portland, Ore., 97214.

• *Carrier Qualifications Training Unit (CQTU)*, Glenview, Ill. — A reunion is scheduled for June. For details, write to E. F. Johnson, 253 S. Highland Ave., Aurora, Ill., 60506.

• *Torpedo Squadron 86*—A reunion is planned for 21-23 August, at Indianapolis, Ind. For more information, write to Laddie Novak, 3737 W. 81st St., Chicago, Ill., 60652.

• USS *John C. Butler* (DE 339)—Shipmates who served during World War II who are interested in a 1966 reunion should write to F. F. (Jeff) Conley, 640-641 Davidson Bldg., Sioux City, Iowa, 51101.

• USS *Gantner* (APD 42) — A reunion is being planned for the summer. For further particulars, write to Ralph C. Swanson, 2402 Lauren Dr., S. W., Cedar Rapids, Iowa.

• USS *New Orleans* (CA 32)—All who served on board during World War II who are interested in holding a reunion with time and place to be decided may write to Joe M. Zak, 416 E. 255th St., Euclid 32, Ohio.

• USS *Sanders* (DE 40)—All who served on board during World War II who are interested in holding a reunion may write to John J. Pepa, Jr., 189 Alexander's Pike, P. O. Box 145, Marblehead, Ohio, 43444.

• USS *Telfair* (APA 210)—All who served on board from January 1953 to January 1956 who are interested in holding a reunion in the midwest this summer may write to D. J. Hayes, Jr., 8 Pasfield Park Pl., Springfield, Ill.

• *USS Abbott* (DD 629) — A reunion is scheduled for next August in Philadelphia, Pa. For details write to John W. Gish, 801 East 3rd St., Kewanee, Ill.

• *USS Wichita* (CA 45) — A reunion will be held in Norfolk, Va., the end of June. For information, write to J. A. Glass, 111 Dupre Ave., Norfolk, Va.

• *1108 USNR Officers*—All former 1108 Naval Reserve officers who maintain Ready Reserve status who are interested in holding a reunion in New York City during the World's Fair are invited to write to John F. Roman, 91-28 121st St., Richmond Hill, N. Y., 11418.

Those Gold Stripes Again

SIR: This may be old stuff to you, but we'd like your opinion on the qualifications for wearing gold rating badges. Our interpretation is that you are entitled to gold only after the first consecutive 12 years of service with good conduct. Others say gold stripes can be worn after *any* continuous 12 years with good conduct. What is correct?—First Class Crew's Mess, USS *Investigator* (AGR 9).

• *In accordance with "Uniform Regulations," Article 0654, an enlisted person must maintain for a continuous period of 12 years' active duty the requirements necessary for the award of the Navy Good Conduct Medal. This may not necessarily be the first consecutive 12 years of a person's enlisted service. The 12-year period could, for instance, start during any enlistment depending on the beginning of the eligibility period for the Good Conduct Medal.*

The principal criterion is that once a person has served for a period of 12 years of continuous active duty (full time duty) in the Navy or Naval Reserve and has fulfilled the requirements necessary for successive awards of the Navy Good Conduct Medal during this time he is entitled to wear gold service stripes. Once this entitlement is acquired that right continues throughout the duration of an enlisted person's service unless he fails to qualify for a Navy Good Conduct Medal, in which case the right to wear gold stripes is terminated; also if the enlisted person is convicted by court-martial and the conviction has become final within the meaning of the Uniform Code of Military Justice, the right to wear gold stripes is terminated. In such a case, he goes back to red stripes.—ED.



THE HULL CLASS destroyer *USS Parsons* (DD 949), underway in Pacific, was one of first U. S. warships with more firepower aft than forward.

Small Cars and Big Men

SIR: Uniform Regulations spell out, generally, where and how the uniform should be worn, but one point does not seem clear. Cars keep getting smaller and smaller until I can no longer wear my hat while driving—it keeps hitting the roof.

Under the circumstances is it necessary for me to wear a hat while in my car?—J. R., YN2, USN.

• *If, because of your height, your hat interferes with the safe operation of your car, it's not necessary to wear it all the time.*

It is not practical for "U. S. Navy Uniform Regulations" to list all the occasions when it could be considered appropriate to remove your hat. However, it seems only sensible to remove the hat in circumstances recognized by custom.

Nevertheless, the hat must always be worn, in automobiles or other places,

under circumstances where personnel are expected to be in the complete uniform of the day; that is, on station, in town, in military vehicles, on duty, in parades, and similar circumstances.

As we said before, the rules concerning the uniform in other than a strictly military situation, are generally governed by custom so, in borderline cases, use your best judgment. There should be no objection, for example, if you removed your hat while driving through the California-Sonora desert in 100-degree heat.

On the other hand, don't expect a sympathetic reaction if you explain to the shore patrol that your sleeves are rolled up because it's hot. For the same reason, it would be well, regardless of the hot weather, to wear your hat when passing through the gate of a military installation.—ED.

Color Perception for LDOs

SIR: While browsing through the December 1962 ALL HANDS recently, I noticed the article on color blindness. Since I am classified as having defective color perception (and know of several shipmates with the same defect), would you please answer the following questions:

(1) Will the Bureau of Medicine and Surgery or the examining board grant a waiver for defective color perception for any of the LDO(T) program categories?

(2) If the answer to the above is yes, then must one request such a waiver at the time of application for the program?

(3) Can a person with only mild color perception defects have the *degree* of color blindness entered in his health record, and would it be to his advantage to do so?

(4) Would you please discuss the reliability of the pseudoisochromatic plate test system of determining color perception (employing numbers appearing on a vari-colored background).—C. L. H., CT1, USN.

• *We will answer your questions in numerical order:*

(1) Waivers of physical standards are not granted by the Bureau of Medicine and Surgery, but rather by the Chief of Naval Personnel upon the recommendation of BuMed. Waivers are recommended for defective color perception by BuMed for all categories of the LDO program except deck, operations and ordnance.

(2) Individual requests for waiver are not required. Waivers will be recommended in appropriate cases upon Bureau review of application.

(3) Current regulations require that the results of color perception tests be recorded in the health record. The determination of degree of "color blindness" other than that provided by standard color perception tests would, in general, serve no useful purpose.

(4) The pseudoisochromatic plate test is considered to be a highly reliable color perception test. However, cases of questionable color perception are resolved by testing with the Farnsworth Lantern in accordance with "MANMED" article 15-11(6).—ED.



FUEL RUNNER—The oiler *USS Kawishiwi* (AO 146), operating out of Pearl Harbor, Hawaii, gets underway for an assignment in the fleet.

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CAREFUL NOW—Men from explosive ordnance disposal team remove WW II 'souvenir' from Pacific port.

That October Blaze Just Won't Die

SIR: In the October 1963 issue (page 30) you answered a letter about fire-fighting procedures where nuclear weapons are involved. Let's take another look at some of that information.

You said that firefighting and weapon cooling should not be attempted if the weapon is engulfed in flames. This is seriously misleading when applied to shipboard procedures. You refer to OPNAV Inst. 8110.16B, which is an unclassified AEC technical information bulletin about controlling accidents which involve atomic weapons. It seems to me that this bulletin was written without consideration of shipboard situations since it advises, in addition to the above, the withdrawal of all personnel to 1500 feet if the weapon is engulfed in flames.

You must admit this suggestion has certain practical limitations, as USS *Enterprise* (CVAN 65), the largest ship in the U. S. Navy, is something around 1100 feet long, I believe. Somebody is going to get his feet wet.

I have been instructed that the most important action that can be taken in this type of accident — in addition to fighting the fire—is to cool the weapon immediately with high velocity fog or other types of water application. It is my understanding that foam should not be used if water is available because it creates a blanket which increases the "cooking" effect.—L. K. W., LCDR, USN.

• *You're so right about the 1500-foot bit. As we read your rather kindly note (under the circumstances), our collective faces approached a fine red glow which too, could have used a touch of high velocity fog or other types of water application. It must have really been one of those days when we let that one go through.*

As to our alibi:

Our information, based on OPNAV Inst. 8110.16B, was correct as far as it went, but we perhaps should have gone to greater depth in qualifying our statement.

The instruction certainly does appear to omit consideration of shipboard conditions when it advises the withdrawal of personnel to 1500 feet. Obviously this would be impossible aboard ship, unless the ship were abandoned. Certainly, this pertains only to situations on a shore station.

However, the experts tell us that when the instruction begins talking about "temperature and time," it does apply to shipboard situations.

If the weapon is engulfed in flames for less than three minutes, attempt should be made to cool the weapon with water fog. Three minutes is the estimated time it would take for a weapon engulfed in flames to reach a temperature of 300 degrees. This temperature is considered critical for the safety of the high explosive component of the weapon.

If the weapon is not engulfed in flames but in the proximity of the fire for less than 15 minutes, attempt should be made to keep the weapon cool by spraying it with water fog or insulating it with foam.

This is the procedure taught at Naval Damage Control Center, Philadelphia, and Damage Control School, Treasure Island.

Type commanders' implementing instructions usually provide more detailed information as to what actions to take in varying circumstances.—ED.

Fire-Fighting Pointers

SIR: Last October, in the ALL HANDS letters section, you discussed certain fire-fighting procedures to follow when nuclear weapons are involved.

I believe you failed to mention some extremely important points.

You said that no attempt should be made to cool a nuclear weapon that's engulfed in flames. In other words, leave it alone.

In cases where the weapon is not in the fire, you added, the foam used to extinguish fuel flames may be spread over the weapon to protect it from radiated heat and from flames. Again, in other words, weapons in the vicinity of a fire, if still cool, may be kept cool by applying foam or water fog.

I have studied the pertinent directive on the subject (OpNav Inst. 8110.16B), which primarily points toward incidents that might occur on a shore station.

This directive does state, as you say, that no attempt should be made to fight fires when the nuclear weapon is engulfed in flames.

It further states that all personnel should remain at least 1500 feet away. This point presents a problem.

Shipboard personnel responsible for controlling a fire around a nuclear weapon engulfed in flames or exposed to radiant heat cannot retire to a safe 1500-foot distance without abandoning ship. Let's face it. Shipboard fires must be fought and kept under control.

With this in mind, a study of shipboard fire-fighting practices when nuclear weapons are involved was made by the fire-fighting department of the Damage Control School, Treasure Island, Calif., with the cooperation and assistance of the Nuclear Weapons School at North Island (San Diego).

We came up with certain ground rules to follow, and some information that may surprise a lot of Navymen.

• The principal danger of a nuclear weapon fire is from the high explosive components, not the radioactive parts. Danger of a nuclear explosion is so remote as to be considered not a primary hazard.

• It takes approximately three minutes for a nuclear weapon engulfed in flames to reach the danger temperature of 300° F. If high velocity water fog can be applied within this time limitation, the internal temperature of the weapon will drop sharply and will remain below the danger point, even though the weapon remains in flames. (We prove this almost every week at the conclusion of our five-day general shipboard fire-fighting course at T.I.)

• While the high velocity water fog is keeping the nuclear weapon cool, the fire may be fought with mechanical foam, making sure the foam is kept off the weapon. (Foam would become a baked-on layer of insulating material. The heat in the weapon's interior would be retained.)

• If the weapon is exposed to radiant heat, but is not engulfed in flames, a 15-minute time limitation should be observed. This is the approximate time it takes for the weapon to heat to the danger point of 300° F. If cooling fog can be applied within this time limit, danger of possible explosion will be minimized.

• Only if the weapon is not hot may foam be applied to act as an insulating blanket.

• Use water fog. Never hit the weapon with a solid stream. Explosive components that have been exposed to heat or shock or both are dangerous. The impact of a solid stream of water could result in an explosion.

Would you kindly inform your readers of these most important points? And, would you pass the following word? Lesson plans concerning shipboard fire-fighting practices on nuclear weapon fires are available upon official request from the U. S. Naval School, Damage Control, Treasure Island, San Francisco, Calif. 94130.—LCDR L. H. Turpin, USN, O-in-C, Fire-Fighting Department.

• *You just passed the word for us, Mr. Turpin. Thanks.*—ED.





FOAM ON THE PLANE — Rescue crew rushes in as truck crew spreads foam. *Below:* Simulated crash starts.

Fire and Rescue

AT NAS ROOSEVELT ROADS there is a group of men who risk their lives daily by walking into raging 1000-degree fires.

They are the 42 men of the aviation crash crew who train continually in the art of extinguishing aircraft fires and rescuing the occupants of aircraft in event of an aviation accident. There have been no accidents involving aircraft on the station in more than three years, even though there are more than 50,000 takeoffs or landings annually.

Walking into the fire is only part of the crash crew's job. Each man must be able to perform every phase of the operation, which may include anything from manning the pumps on the trucks to rescuing the pilot or crew.

The men are taught the particular characteristics of every type of aircraft: Where the pilots and crew should be, where the fuel tanks are located, where the escape hatches are, and in the event of an unexpected crash, where to rip open the craft to save the men inside.

Two aircraft mockups are used as training aids. The dummy planes have wings and a body and a cockpit where an unconscious pilot (usually a sand-filled oil drum) awaits rescue. One hundred and fifty gallons of aviation gas are poured on and around the plane and ignited.

One of the crash crew trucks rushes to the crash. Before the truck screeches to a halt, its two turret pumps on the top of the truck are spewing out a torrent of fire-smothering foam. The foam, composed of fish scales, cattle horns and hooves and soya beans, spreads across the surface of the fire shutting off the oxygen. At the same time two men clad in aluminumized fire-resistant suits enter the flames to the cockpit to save the pilot. One places a ladder against the plane and the other climbs up and pulls the pilot out.

Every man on the crash crew, regardless of his size, has to be able to pull a person from a plane. In addition to practicing the rescue of the "oil drum pilot" from the burning mockup, the team members practice pulling live pilots, playing dead, from their own planes.

The smallest difficulty in an aircraft is cause for the crash crew to go on alert and rush to the scene when the aircraft lands. In the words of the leading man in the crew, Edward Troutt, ABC, USN, "It's worth going out on 500 alerts for drill when there's nothing wrong, just to know we'll be ready for a real emergency."

—Bill Missett, JO2, USNR.



FIRE AWEIGH — After the rescue the remainder of the blaze is extinguished.



Reorganization Roundup

NOBODY NEED BE TOLD that today's Navy is subject to demands which would have amazed almost everyone only 25 years ago, or that these unusual demands, placed on the Navy's operational leaders, later sift down to their supporting echelons.

The peacetime Navy of today has been affected by profound changes in weaponry, strategy and global commitments which influence every facet of the Department and its operating forces.

It was these demands and problems created by change that prompted the Secretary of the Navy, in March 1962, to appoint his administrative assistant, Mr. John H. Dillon, to act as chairman of a committee to initiate a comprehensive review and appraisal of the Department of the Navy.

Here is a summary of the recommendations of the multi-volume Dillon report which are now taking form to give the Navy its first major organizational overhaul in many a year.

THE SECRETARY OF THE NAVY, as most Navymen know, has two principal military officials who report directly to him—the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps (CMC).

The Chief of Naval Operations is responsible for planning; for determining the needs of the Fleet for ships, aircraft, weapons and personnel; and for general programing of resources to fill these needs.

The Commandant of the Marine Corps performs a similar planning function for the Marine Corps.

In performing these functions, both CNO and CMC determine and express the needs of the operating forces who are the *users* of the Navy.

Also, directly under the Secretary, are the six bureaus (Weapons, Ships, Supplies and Accounts, Yards and Docks, Personnel, and Medicine and Surgery) which are the *producers*—either of material or manpower—for the operating forces.

The Navy has a name for this division of responsibility, under the Secretary, of *user* and *producer* functions. It is commonly referred to as the Navy's *bilinear system of organization.*

The Dillon Committee concluded that this basic bilinear system of organization had served the Navy well and should not only be retained but should be strengthened.

It also believed that the bilinear organization could be operated even more effectively, efficiently and economically. Several structural changes were recommended by the Dillon Committee. One was exceedingly large in scope and is beginning operations. It is the Naval Material Support Establishment, discussed below.

Briefly, the Naval Material Support Establishment, under the Chief of Naval Material, will supervise the work of providing material support needs as determined by the CNO or CMC.

The Secretary of the Navy will have in the Chief of Naval Material a single executive responsible for executing the programmed material support efforts of the Department, enabling the Chief of Naval Operations and the Commandant of the Marine Corps to concentrate on Fleet operations, over-all planning, and current and future supporting requirements.

The Fleet Activities Command

Another of the Committee's major proposals involves the administration of Navy field activities. A number of problems uncovered during the review concerned the relationships between shore activities and the Fleet. The Dillon Committee proposed the establishment of a Fleet Activities Command as a remedy.

On 1 Jul 1962, the Navy had 285 major and several hundred minor shore activities located around the world. Their management control was divided among 10 bureaus and offices of the Navy Department.

Military command flowed from the Chief of Naval Operations through the various District Commandants.

Technical direction of specialized functions stemmed from departmental components charged with responsibility for such functions.

To strengthen the channels of supervision and improve efficiency, the Dillon Committee recommended that a separate Fleet Activities Command be established, for direct Fleet support shore activities, under the Chief of Naval Operations, with one officer to head it.

The purpose of the Fleet Activities Command will be to insure that Fleet requirements are adequately supported by its shore installations.

The new organization will be a field activity, but it may maintain a few liaison personnel in OPNAV. The Commander will be equal in stature to a Deputy Chief of Naval Operations.

If FAC is implemented according to the committee's recommendations, the facilities assigned to the Fleet Activities Command would be organized into about 27 complexes to be called Naval Operating Bases (NOBs). The direct support activities would become departments or divisions under the Operating Base Commander of each NOB and would be completely under his control.

Each NOB commander would provide a focal point and act as the Operating Forces Representative in identifying the requirements of the forces afloat for support provided by tenant activities.

In addition, an NOB commander would exercise military administration over tenant activities which remain under the command and supervision of a bureau or office.

He would also provide community facilities, common services and other support in accordance with host-tenant agreements.

The NOB commander would also be the executive in charge of such functions as facilities planning, real property utilization and similar functions of a community nature.

Formal communications would be established between commanders in the operating Fleet and the Fleet Activities Command headquarters to insure Fleet participation in the budget preparation and review processes at the highest level. Fleet commanders would also have a hand in formulating workload requirements for executing their assigned missions.

A representative from each type command or force command would be assigned to each NOB complex to

speak for the Fleet and advise the Operating Base Commander of Fleet needs. This would produce a balance between the Fleet workload and resources needed to accomplish it, and provide adequate programing from the lowest to the highest level.

These organizational changes should remove Fleet support from its status as a virtual byproduct and give meaning to the slogan *"Our Purpose—to serve the Fleet."*

Another important recommendation concerns the maintenance of facilities at naval shore activities.

Heretofore, responsibility for facilities maintenance and its funding has been divided on a bureau and office basis. To provide a central control or directing agency, the Dillon Committee recommended that the Chief of the Bureau of Yards and Docks be designated as the single executive responsible for facilities maintenance of grounds and buildings and operation of utilities at naval shore installations (except those of the Marine Corps and "Industrially Funded" activities).

Commanding officers of the activities concerned will actively participate in formulating the budget, either with BuDocks or through its regional office. Funds for these activities will be administered in the same way.

Shore activities which fund their maintenance from the Navy Industrial Fund System will continue to do so. BuDocks, however, will still exercise technical direction over maintenance of these activities.

Planning and Programming

In the area of planning and programming, two new offices will be established:

The *Navy Plans and Programs Office* in the Office of the Chief of Naval Operations will have authority to supervise and coordinate the Navy program planning effort.

A *Program Appraisal Office* will also be established as a staff office to assist the Secretary of the Navy. This will provide the secretariat with an independent and improved capability to appraise progress against approved programs as well as to analyze proposed programs.

ADM David L. McDonald, USN, the Chief of Naval Operations assigned the Assistant Vice Chief of Naval Operations, RADM Roy Benson, the responsibility for coordinating the implementation of all recommendations assigned to CNO for action.

Introducing—

The Naval Material Support Establishment

TIME PRODUCES CHANGE, and change—properly channeled—produces progress. A Navyman on the job sees it in his improved capabilities and he sees it in the Navy. To pave the way for such progress, major organizational changes are often required to provide the Navy's management with the flexibility and capacity necessary to maintain today's pace.

In the 25 years which have elapsed since World War II began, the techniques of warfare have changed radically. In March of 1962, once again the sea service took stock of its organizational setup, and the Secretary of the Navy appointed a committee to do the job. Its task: to appraise the effectiveness and economy of the Navy's management processes and structure.

The committee came forth with 223 recommendations which it believed should be made effective as soon as possible. When they have been implemented, the proposals will affect almost every facet of the Navy. One of the most far-reaching of the proposals has been implemented. It calls for the institution of the Naval Material Support Establishment.

One out of every six men in the Navy will work for NMSE. Its influence will be felt by the men in the Fleet and, indeed, by the nation—for when the Navy steams to the trouble spots of the world, it will be there fustest with the mostest.

SecNav's General Order Number Five established NMSE in July 1963. Later last year came the announcement that the Chief of Naval Material would "assume supervision and command" of the Navy's material Bureaus of Naval Weapons, Ships, Supplies and Accounts and Yards and Docks.

An order this far-reaching is pretty bone rattling. It may have led some to suspect that something was wrong with the Navy's old organization to warrant such a shakeup. Nothing, however, could be further from the truth.

THE CHANGE is prompted by evolution, not revolution. Nothing is being destroyed. The changes are simply designed to make a good system even better.

The Navy operates on land, on and under the sea, and in the air—and Navymen have even been in space. Add these varied responsibilities and the technical advances of the past quarter century to the procedures involved in developing, procuring and producing new naval weapons and you have a good reason for adjustments in the naval household.

The Chief of Naval Operations has the job of deciding what the Navy must have to accomplish its mission. In carrying out this and his other responsibilities in the future, CNO will have the advantage of speedier coordination under the new material support organization.

In the past, he would say to each of the material bureaus, "This is what we need. Produce it."

Let's say, for example, the Navy needed a particular type of ship. BuShips would build it. It would be armed by BuWeps. BuSanda would provision it and BuDocks would berth it.

Perhaps the vessel envisioned would be too large for any existing drydock, or perhaps the weapons proposed would necessitate elimination of essential features.

IT DOESN'T TAKE MUCH imagination to conjure up situations in which differing interests and emphases could produce problems and friction where spheres of responsibility meet.

Before the ship could be built, the differences among the material bureaus would have to be resolved. Frequently, they have reached on up to the Secretary of the Navy, requiring SecNav to make the decision as to what will be sacrificed for the good of the project.

It isn't difficult to see that this could take up much of SecNav's time and produce a situation in which a

(Continued on page 34)

NEW ORGANIZATION OF THE

SECRETARY OF THE

UNDER SECRETARY OF THE NAVY

ASSISTANT SECRETARY OF THE NAVY R&D

OFFICE OF NAVAL RESEARCH

CHIEF OF NAVAL OPERATIONS

VICE CHIEF OF NAVAL OPERATIONS

OFFICE OF THE CHIEF OF NAVAL OPERATIONS

CHIEF NAVAL MATERIAL

FLEET ACTIVITIES COMMAND

DISTRICT COMMANDANT

NAVAL OPERATING BASES

SUPPORT

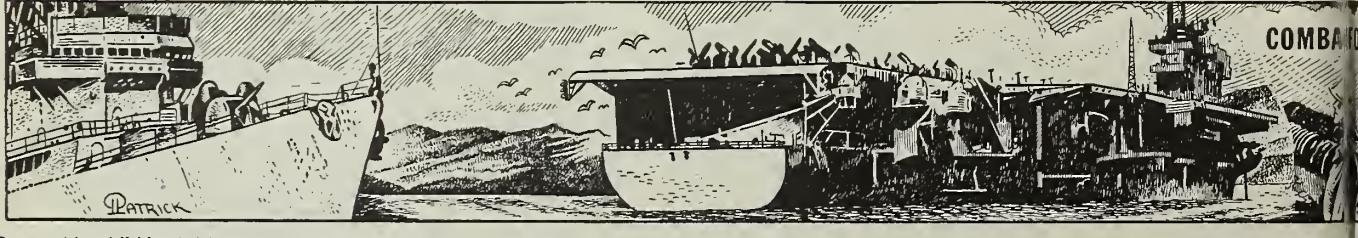
BUREAU OF NAVAL PERSONNEL

BUREAU OF MEDICINE AND SURGERY

BUREAU OF NAVAL WEAPONS

SHORE ACTIVITIES UNDER

SUPPORT



Prepared by All Hands Magazine

DEPARTMENT OF THE NAVY

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ROJECT MANAGERS

COMMANDANT OF THE MARINE CORPS

ASSISTANT COMMANDANT OF THE MARINE CORPS

HEADQUARTERS U.S. MARINE CORPS

BUREAU OF SHIPS

BUREAU OF SUPPLIES AND ACCOUNTS

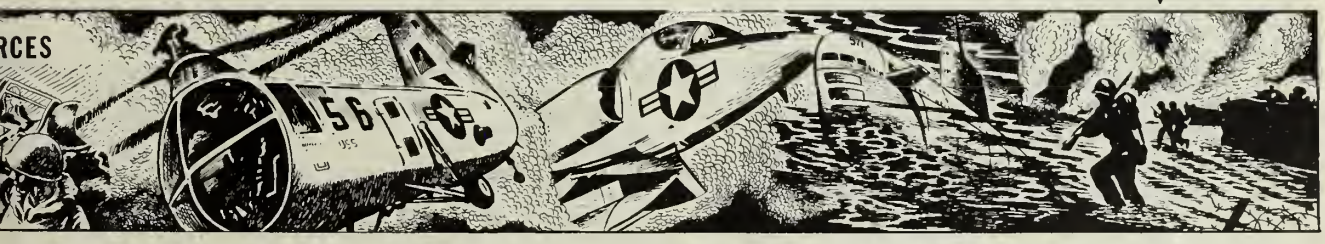
BUREAU OF YARDS AND DOCKS

MMAND OF BUREAUS

SUPPORTING ESTABLISHMENT

FORCES NOT OTHERWISE ASSIGNED

SUPPORT



March 1964

REORGANIZATION ROUNDUP

(Continued from page 31)

considerable amount of completed work might have to be redone.

A problem was also posed for the bureau chiefs whose time and energy were being diverted from their primary mission—that is, the technical pursuits of their particular bureaus.

This problem could be solved, the Study Committee decided, by creating a single executive who will serve the Secretary of the Navy, the Chief of Naval Operations and the Commandant of the Marine Corps by advising them on the technological and economic possibilities of meeting the needs of the operating forces.

THE NEW EXECUTIVE — Vice Admiral William A. Schoech, USN — has the title Chief of Naval Material. He is appointed by the Secretary of the Navy and has the deceptively simple mandate to conduct the missions of the Office of Naval Material bureaus effectively, efficiently and economically. He will "control but will not operate" the four material bureaus.

The new chief will clarify the bureaus' objectives and the objectives of his other subordinates; establish ground rules for getting the job done and resolve any problems which come up among his subordinates.

Coupled with these tasks, the new Chief of Naval Material will represent NMSE in meetings with the Secretary of the Navy, the Chief of Naval Operations and the Commandant of the Marine Corps.

He will be one of the principal Navy representatives in meetings with the Army Material Command, the Air Force Systems and Logistics Commands and the offices and agencies of the Secretary of Defense.

As if this weren't enough, the Chief must also maintain close personal contact with the senior commanders of the Fleets which receive material support and, of course, be personally in the know in matters concerning his own command.

The new Material Support Establishment will employ a system of project management for getting big jobs done. Smaller projects and programs will be managed by the material bureaus under which they fall.

WHEN THE Naval Material Support Establishment came into existence last December, the major projects at the Chief of Naval Material level were: the Fleet Ballistic Missile Program (*Polaris*), Surface Missile Systems Project (*Terrier, Tartar, Talos*), The F-111B (TFX) and Anti-Submarine Warfare Projects (*Seahawk, Dash* and others). When more organizational wheels begin turning, more managers will undoubtedly be appointed at this level.

Most Navymen will realize they have seen concrete results from this form of organization although they may not have realized they were witnessing project management in action.

The success achieved by project management is due to simplifying organizational structure. This is done by directing interest to one ultimate goal through layers of organization which are concerned with comprehensive problems.

As before, the Navy employs graduated project management. This means simply that the project is placed at a level in the appropriate material bureau which the size and importance of the project dictates. This level of management has the responsibility for the project, the authority to get the job done and the resources with which to do it.

Ideally, every project manager should have exclusive rights to all the technical help he could use to get his job done. Since this is impossible, the Navy must concentrate its technical skills and operate as economically as possible.

This brought about the recommendation that project managers should come under the Chief of Naval Material, thereby giving them (as well as the material bureaus giving them functional support) a common military superior.

The new project managers will enjoy broad authority for the executive direction of their assigned jobs. They will, however, be directly responsible to the Chief of Naval Material for the progress of the work being done under their command, as to time, resources employed, and performance required.

When project managers encounter problems of priority and have difficulties involving other executives, the problems and difficulties will be resolved by the Chief of Naval Material as they occur.

PROGRAM AND RESOURCE control will be combined at the staff level under the Deputy for Programs and Financial Management.

The combination of program and resource control under one executive is expected to eliminate situations whereby an officer might be held responsible for a program without having control of the resources to carry out his program responsibilities. Or just as bad, another officer might be given the control of the money for all programs but not the responsibility for the effectiveness of those programs.

Combining programs and financial management will coordinate these two interdependent elements at the Office of Naval Material level.

Although the Naval Material Support Establishment calls for strengthened project management and prompt resolution of internal problems, it will not radically change the real character of the Navy's four material bureaus.

The bureaus are expected to continue much as they have in the past, except that they will now receive direction, guidance, coordination and assistance from their new common superior. As was mentioned earlier, the function of the Naval Material Chief is to control, but not to operate, the bureaus.

TO ACCOMMODATE the new organization, however, the Secretary's study group recommended that some bureau functions be realigned. The realignment will take place gradually and will ultimately make the bureaus more effective and strengthen their orientation toward their more important missions.

For example, the study recommends:

- That primary responsibility for shipboard components ultimately be transferred from BuWeps to BuShips.
- That shore activities not supporting the material and technical missions of Bureaus be managed by the Fleet Activities Command (which is another facet of

the reorganization and under the Chief of Naval Operations) see page 30.

• That the management of ship and aircraft operating funds also be reassigned to the Fleet Activities Command.

The responsibilities for managing and funding the maintenance of buildings and grounds and the operation of utilities have already been reassigned from other management bureaus and offices (except the Marine Corps) to the Chief of the Bureau of Yards and Docks, who will perform these responsibilities as the single executive for facilities maintenance.

The establishment of uniform policies of material provisioning and supply management is another facet of the reorganization.

Some of these changes may relieve the bureaus of the responsibility for management of Fleet operating funds and some Fleet support shore activities. All will direct the missions of the four material bureaus toward squeezing the most out of their technical jobs in support of projects and programs directed by the Chief of Naval Material.

The efforts of all will be aimed toward the satisfactory completion of whatever project or program is underway.

TO UNDERSTAND BETTER just what the bureaus will be doing under the new organization, let's examine their responsibilities as outlined in their proposed charters.

Bureau of Naval Weapons

The Bureau of Naval Weapons will be the primary bureau of the Navy concerned with aircraft, weapons and related equipment.

More specifically, it will have material responsibility for all weapons, components, systems and equipment, including missiles, ammunition, and surface and underwater ordnance.

It will also be responsible for Navy and Marine Corps aircraft, components, systems and equipment, including catapults, arresting gear, fuels and lubricants.

Such diversified items as airborne target drones, photographic and meteorological equipment, astronautic vehicles and equipment and special tools and equipment for explosive ordnance disposal also come within its purview.

BuWeps will also provide comprehensive guidance covering aviation and explosive safety. This includes the development of safety procedures for explosive ordnance disposal as dictated by interservice agreements.

Bureau of Ships

The area of material support for which the Bureau of Ships will be responsible includes vessels, amphibious craft and vehicles, boats, surface targets, barges, service craft and other surface and sub-surface craft of the Navy.

There are some exceptions to this over-all responsibility, however, They are service craft assigned to the Bureau of Yards and Docks. Commissioned and in-service ships administratively assigned to the Military Sea Transport Service are also excepted.

Other BuShips responsibilities involve shipborne components and systems which have not otherwise been assigned, and materials and appliances for defense against chemical, biological and radiological warfare in ships and other waterborne craft.

Miscellaneous responsibilities include respiratory protective devices, diving equipment, submarine rescue methods and equipment, and submarine escape training facilities.

Special devices of the Naval Communication Service also come within the scope of BuShips responsibility—as do radio, radar, radiac and sonar equipment and accessories for use ashore, as well as equipage for salvaging sunken and stranded vessels.

The Bureau of Ships will also conduct and coordinate studies and investigations of radiological contamination and the decontamination of radioactivity.

It will also establish specifications for fuel and lubricants for use in naval vessels. It will contract for and supervise salvage operations and maintain data concerning all vessels and craft (except aircraft) of the Navy.

In addition, it will review the technical aspects of merchant ship plans submitted by the Maritime Administration to determine their suitability for conversion or use in time of war or national emergency.

Bureau of Supplies and Accounts

The Bureau of Supplies and Accounts will act as material manager for the Naval Material Support Establishment. This includes provisioning, inventory management, supply management and disposal.

Specifically, BuSanda will provide technical guidance for Navy material to activities of the Navy and the Marine Corps.

It will administer the Navy Supply System, the Navy Printing and Publication Service, the Resale Program, the Ration Law and the Stock Fund.

It will also purchase, in accordance with authority delegated by the Chief of Naval Material, and perform supply, budgetary, fiscal and statistical functions in support of the Navy's military assistance program and a centralized program of Naval storage facility control.

BuSanda's material support functions will cover materials handling equipment; special clothing not procured by other bureaus; food; and all other naval material for which responsibility is not otherwise assigned.

It will undertake the supply management of naval material items assigned to its control and the transportation of Navy property and the property of naval and civilian personnel. It will maintain official stores accounts for Navy material entrusted to the custody of accountable officers.

BuSanda will conduct research and development in materials, methods, equipment and systems with respect to special-purpose clothing, commissary equipment and food, advanced supply logistics, cargo and materials handling, packaging and preservation and ship's store service equipment.

BuSanda also will provide technical guidance with respect to preparation and service of food in general messes (except at naval hospitals) and provide assistance in the planning and layout of supply spaces ashore and afloat.

Bureau of Yards and Docks

The job of the Bureau of Yards and Docks is, in a nutshell, to look after the Navy's real estate. This, of course, is a simplification. To be more precise, it is

responsible for the planning, design, construction and maintenance of the naval shore establishment.

BuDocks will provide support to the operating forces of the Navy, the Marine Corps, other supporting organizations and components of the Naval Material Support Establishment in the general area of shore facilities and related material and equipment.

Its material support functions will cover public works, floating drydocks, floating cranes, amphibious pontoon equipment, fixed surface and sub-surface structures, utilities, construction, transportation (including automotive vehicles) and weight-handling equipment (except that belonging to the Marine Corps and equipment assigned to another bureau or office).

Materials and appliances for defense ashore against chemical, biological and radiological warfare, except instruments for detection and measurement of radioactivity, will all fall within BuDocks' jurisdiction.

BuDocks will also be responsible for maintenance of grounds, buildings and structures; operation and maintenance of utilities; and acquisition, management, maintenance and disposal of family housing (except at Marine Corps activities).

It is charged with the inspection and approval of design and construction for items which are funded from Navy appropriations at privately operated establishments and that which would constitute public works or public utilities if constructed at a naval shore activity.

It will handle the acquisition, inventory, disposal and (except for the Marine Corps) leasing of real estate. Its job will also include the management of excess real property, and it determines and authorizes the rates of sale of utility services to private parties, other government agencies and welfare activities within the Department of the Navy.

BuDocks will also develop programs, procedures, standards and technical data (within established policies) and coordinate technical assistance for natural resources management.

IN CONSIDERING the functions of the four material bureaus under the Naval Material Support Establishment, you may have gained the impression that, basically, they have retained, or have been delegated, those duties which directly apply to their technical mission. If you did, the impression is correct, for here and there duties have been lopped off one bureau and added to another or given to an office of the Naval Material Support Establishment. In some cases, they have been reassigned to other naval organizations, such as the Fleet Activities Command.

The Naval Material Support Establishment is today only in its infancy. There is, however, little doubt that the concept will work. It is used by large corporations and is a fact of big business life.

For the Navy, it should produce a single military officer whom the Secretary of the Navy can hold responsible for managing the material support efforts of the Navy Department.

The Chief of Naval Operations and the Commandant of the Marine Corps can concentrate on today's operations and tomorrow's requirements, leaving material support to the Chief of Naval Material.

The Assistant Secretaries will have a single executive agent through whom they can exercise their functional responsibilities.

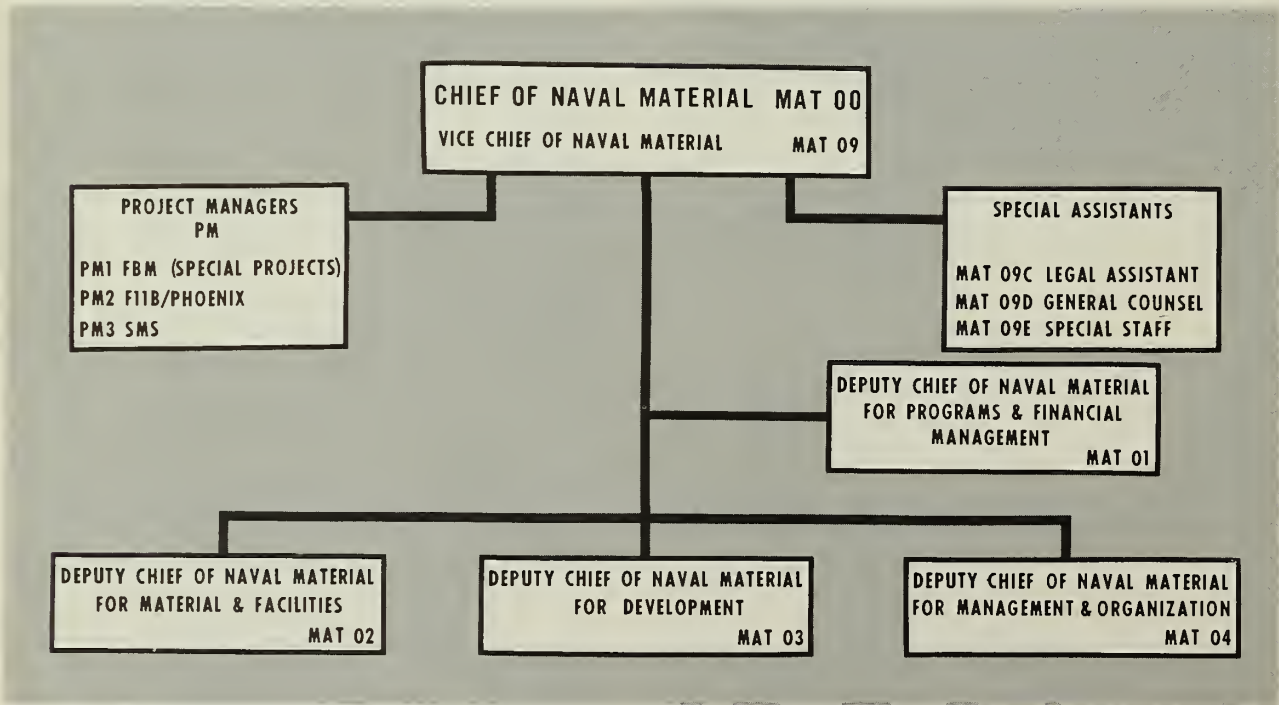
Effective project management will be made easier.

Conflicts among the material bureaus can be more readily resolved.

Wartime logistic support will be possible without a major organizational upheaval.

These factors combined will produce an improved environment in which the scientist, the engineer, the technician and the manager can work more effectively.

When they are added together, these changes should produce the sum total which, simply stated, is the raison d'etre of the Naval Material Support Establishment: Better weapons faster and more economically for the combat forces of the Fleet. —Robert Neil



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

America Is Launched

The Navy's eighth post-World War II attack aircraft carrier, *America* (CVA 66), was launched at Newport News last month.

America has an over-all length of approximately 1048 feet and her flight deck is 252 feet wide. Her full load displacement is 77,000 tons and, when operational at sea with air group embarked, she will have a complement of 4900 officers and men.

America will carry surface-to-air *Terrier* missiles, the Naval Tactical Data System (NTDS), long range radar installations, a bow-mounted sonar for submarine detection and an automatic landing system.

The new carrier will have four steam catapults and four deck-edge elevators. Her conventional power plant will deliver 200,000 shaft horsepower to propel her at speeds in excess of 30 knots.

America's keel was laid in January 1961. Her completion date is expected to be early in 1965.

Essex Is an Active Twenty-One

The Navy's oldest commissioned aircraft carrier, USS *Essex* (CVS 9), is 21. *Essex* was the first U. S. commissioned aircraft carrier ever to reach that age while on active duty.

The ship is the second oldest active aircraft carrier in the world. The oldest is HMS *Victorious* of the British Navy, which was completed in May 1941.

Essex was the first of the class which bears her name. More than 20 *Essex*-class CVs were eventually commissioned, though several were built too late to take part in World War II.

Commissioned CV 9 on 31 Dec 1942, *Essex* steamed for the Pacific Theatre in May 1943. That August she participated in a surprise attack at Marcus Island and later played a part in almost every major Pacific battle of the war.

In 1947 she was inactivated, to remain with the mothball fleet for four years. She was then recommissioned after her flight deck had been enlarged and a new superstructure installed.

During the Korean Conflict *Essex* made two action cruises with Task Force 77.

In 1955 she pulled into the yard for the installation of an angled flight deck, hurricane bow, and a new deck edge elevator. She was reclassified as a CVS in March, 1960. In the Atlantic, she was on hand during the Cuban crisis of 1962 and participated in the quarantine operation.

Essex is still going strong. Presently serving with the Antisubmarine Force, Atlantic, she is headquarters for a Lant Fleet hunter-killer group.



THE NUCLEAR-POWERED fleet ballistic missile submarine, *USS Andrew Jackson* (SSBN 619), displacing 7000 tons, has joined the U. S. fleet.

No Rocker for Grandma

Grandma *Cimarron* will spend her silver anniversary doing what comes naturally—pumping fuel oil and aviation gasoline to other ships in the Seventh Fleet.

USS *Cimarron* (AO 22) has had the longest continuous commissioned service of any active ship in the Navy. Commissioned on 20 March 1939, she has rarely rested since.

She's a war horse, too. The oiler participated in almost every major operation in the Pacific during World War II and fueled more ships than any other fleet oiler at that time.

Cimarron is currently on deployment to the Western Pacific.

BUILDERS OF THE NAVY



Captain Thomas Truxtun lived in an era when the cat o'nine tails and keelhauling were facts of Navy life. Despite the severity of contemporary discipline, however, Truxtun's motto was "Care for your men; see that each understands his duties; exact instant obedience; superintend everything; practice daily with the guns." The state of preparedness which his ship CONSTELLATION maintained, and the respect for discipline which he instilled in his men were largely responsible for his defeating INSURGENTE in 1799 and VENGEANCE in February of 1800 during the undeclared war with France.

Fresh Water for McMurdo

Although McMurdo Sound has always had an abundant supply of water, it was all frozen. The solid water has had to be laboriously hauled from snow mines and melted before it could be used.

The installation of McMurdo's PM3A nuclear power plant created the possibility of other water sources, however. Last year, the possibility began its move toward becoming reality when a structure to house a de-salting plant was built by U. S. Naval Mobile Construction Battalion Eight from Davisville, R. I.

This year, the Seabees expect to complete the job in the five months during which the weather permits construction.

Two 55,000-gallon salt and fresh water tanks are being installed as well as a distillation unit with a capacity of 14,000 gallons of fresh water per day.

Pipes will be laid on the slope of Observation Hill to the Ross Sea from which water will be pumped up the hill for processing.

To keep the salt water from freezing on its way up the hill, the pipe will be surrounded by coils heated by electricity from the nuclear power plant.

After the salt water is distilled, it will be piped to McMurdo consumers.

The medics are happy about the prospect of an ample water supply because they expect it to decrease the number of digestive illnesses which occur due to insufficient water.

Everyone else is pretty pleased, too, from the man who likes to stop at the drinking fountain whenever he feels thirsty to the chief commissaryman who rubs his hands together in anticipation of using steam to prepare food.

Jet-Propelled Ships?

Will ships of the future be jet propelled?

This is a question the Navy hopes to answer while checking out a waterjet propulsion system designed to drive ships across the water at speeds of more than 80 knots.

The waterjet is an aquatic version of a jet aircraft engine. It swallows large quantities of water (aircraft gulp air), passes it through engine-driven pumps, and ejects it through rear nozzles.

The result is a water produced thrust that sends the ship racing across the water.

Engineers who designed the system make two points in summing up the advantages of waterjet propulsion over marine propellers (such as those now in use).

- Mechanical simplicity—no complex gearing and shafts.
- Reduction of water cavitation problems. (At high speeds a water vapor bubble, or cavitation, forms around the blades of a ship's propeller. Bubble bursting, which results from the high pressures generated, sometimes produces a force strong enough to tear the prop apart.)

Emphasis on waterjet design is being placed on a system capable of powering a large hydrofoil ship at speeds of 80 knots (92 mph). Also under study is the possible use of waterjet propulsion for conventional surface ships.

The waterjet system will be studied under a Navy contract by a commercial aircraft company on the West Coast. It is expected that the study will take two years to complete.

Look, Fellas—No Hands

The electronic equipment which is being used more and more to help run the Navy is reliable only if Navy technicians can keep it operating properly. Some of the electronic systems these technicians are trained to care for have incredible-sounding capabilities.

At the Naval Air Technical Training Center, Glynco, Ga., for example, Navymen are being trained to care for the SPN-10 Automatic Landing System, a "hands-off" system that can automatically control and land an aircraft—even on an aircraft carrier in heavy seas when visibility is obscured by heavy rain, snow or fog.

The system is already operating on four carriers — USS *Midway* (CVA



WELCOME ABOARD — Norman Paul, Assistant Secretary of Defense (Manpower), visits *USS Pocono* (AGC 16) during exercise 'Quick Kick'. Left, he is briefed by VADM John McCain, Jr., USN, Commander Amphibious Force, Atlantic. Right, he extends congratulations to a group of top chief petty officers of the amphib force flagship.





VARIETY STORE — Items from uniforms to sodas are available in centralized ship's store of *USS Frontier* (AD 25).

41), *Independence* (CVA 62), *Franklin D. Roosevelt* (CVA 42) and *Ranger* (CVA 61). It is a dual-radar system, capable of handling over 100 aircraft an hour. It is expected to contribute to a decrease in accident rates when visibility is limited, being able to function even when the ship is heaving excessively.

Classroom training on maintenance of the system began recently at Glynco after the gear was installed in a hangar training area.

Graduates of the advanced electronics technician school and the computer school who are second class and above are eligible for training.

NAS Port Lyautey Closes

After an acceptance speech by Moroccan Foreign Minister Ahmed Reda Guedira, the band played the Moroccan national anthem and two soldiers hoisted their country's red and green flag.

This brief ceremony marked the end of the U. S. Naval Air Station, Port Lyautey, Morocco, a familiar stopping-over place for Navymen transient to and from the Mediterranean, and a familiar duty station for many Navymen and Marines since World War II.

Under an agreement with the Moroccan government, the United States has closed all its bases in that country.

Port Lyautey is now a Moroccan Army base, and will also serve as the site of Morocco's military academy. The academy began setting up shortly before the base was transferred, and it is expected that a senior officers' school will also be added.

The U. S. Naval Station at Rota, Spain, now handles the functions formerly performed by NAS Lyautey, including operation of VR-24, which supports naval activities in the European-Mediterranean area.

Frontier Store

A centralized ship's store has replaced the ship's service, soda fountain, and uniform clothing stores aboard USS *Frontier* (AD 25) in Long Beach, Calif. It is one of the first consolidated ship's stores scheduled for installation in Navy ships under a new ship's service modernization program.

Frontier's store is built like an exchange ashore, with self-service shelves for many items and clerk service for more expensive merchandise such as watches and cameras. An ice cream bar serves within the store and through an outside service window. It's a popular spot.

Cigarette, candy and canned soft drink machines are located near the store and will operate 24 hours a day. The canned soft drink machines were installed by the Navy Department on a trial basis. If proven feasible, they may replace the standard paper cup vending machines now used throughout the Navy.

Most of the construction work for *Frontier's* new store, which opened in December, was done by the ship's repair department.

Sacramento Stays In Seattle

The Navy's first fast combat support ship, *Sacramento* (AOE 1), which is designed with the combined capabilities of three ships in one, will be homeported in Seattle, Wash., upon commissioning.

Sacramento will have a crew of 508 officers and men. She will function as an oiler, an ammunition ship and, to a lesser degree, a stores ship. She will provide the Fleet with black oil, aviation fuel, diesel fuel, conventional ammunition, various missiles and ordnance, provisions and other freight.

She will be capable of sustained speeds in excess of 20 knots and will have a vertical replenishment capability with three cargo helicopters. Because of her high speed capability, she will operate as an integral part of a fast carrier task force rather than with slower underway replenishment groups.

Sacramento was launched at the Puget Sound Naval Shipyard in September. Her tentative date for commissioning is March 1964.

Seaplanes Leave Atlantic Fleet

The end of 1963 marked the end of an era for naval aviation for it was on 30 December that the last seaplane patrol was flown in the Atlantic Fleet.

The last patrol brought to a close 53 continuous years of Atlantic Fleet seaplane operations and 21 years of seaplane operations by Patrol Squadron 45 which began flying P3A *Orions* in January.

PATRON 45, which has spent 20 of its 21 years deployed outside the United States, came home upon the arrival of the *Orions* in the squadron. Its new home is Jacksonville, Fla., where it is under the control of Commander Fleet Air Wing 11.

All-Navy Sports Tourneys Get Underway

RULES FOR THE 1964 All-Navy sports championships have been published, and competition is underway. The first event this year is the basketball tournament at Naval Station, Norfolk, from 2-7 March, closely followed by swimming at Naval Training Center, San Diego, on 13-14 March.

Championships this year will be staged in six other sports: volleyball, boxing, bowling, tennis, golf and softball.

Here are rules concerning each event:

• **Basketball (Men):**

National Basketball Committee rules.

Double elimination tournament.

Maximum 12-man squad, including officer-in-charge, manager and coach.

Interservice team—A team to represent the Navy in the Inter-Service championships will be selected, using the All-Navy winner as a basis, and including outstanding players from other teams competing in the All-Navy championships.

• **Swimming (Men):**

AAU rules.

Events—100-meter, 400-meter and 1500-meter freestyle; 200-meter backstroke, breaststroke and butterfly; 400-meter individual medley; and 400-meter freestyle and medley relays.

Maximum 12-man squad, plus officer-in-charge and coach.

Entries—through regional coordinators.

• **Volleyball (Men):**

International rules.

Double round robin tournament.

Maximum 12-man squad including coach and officer-in-charge.

A training squad will be selected from competing teams as the basis for a Navy Interservice team.

• **Boxing:**

AAU rules modified to three three-minute rounds, with headgear mandatory.

Single elimination tournament.

Squad composed of one participant in each weight class, plus officer-in-charge and coach.

Squads will furnish headgear and uniforms; host command will furnish gloves, hand wraps and other necessary equipment.

A training squad will be selected



from competing teams as a basis for the Navy Inter-service team.

• **Bowling (Men and Women):**

ABC and WIBC rules.

Men will compete in a single round robin, six games per match. Women will compete in a double round robin, three games per match.

The five members bowl each game, with only the highest four scores counting toward team winner. Low scorer in each game can count score toward total pinfall for individual championship.

Highest team scores win men's or women's championships, and highest individual scores win men's or women's individual championships.

• **Tennis (Men and Women):**

USLTA rules.

Four men in Open category and two in Senior category from each region, and four women in Open category from each coast constitute maximum squad sizes.



Single elimination tournaments.

A men's team of five Open and three Senior competitors will be selected to represent the Navy in the Inter-service championships.

• **Golf (Men and Women):**

USGA rules.

72-hole medal tournament.

Four men in Open category and two in Senior category from each region, and six women in Open category from each coast constitute maximum squad sizes.

A men's team of five Open and three Senior competitors will be selected for Interservice competition.

Invitational qualifying tournaments will be held on each coast for women to qualify for All-Navy competition. Dates and sites will be announced by commands selected as hosts for these events. Participants will be nominated on a command or district basis.

• **Softball (Men):**

ASA rules.

Double elimination tournament.

Maximum 16-man squad, including officer-in-charge and coach.

Subject to provisions of Department of Defense policy on participation in events within the public domain, the All-Navy championship team, if otherwise qualified, may participate in ASA Men's World Fast Pitch Tournament.

Teams or individuals who qualify for the All-Navy championships should remember that they will be expected to represent the Navy at higher levels of competition if selected.

Individuals competing in All-Navy events will receive $3.00 a day per diem for the period of participation and travel time involved.

Details are contained in BuPers Notice 1710 of 10 Jan 1964.

Oriskany Takes Seventh Fleet

The basketball team of USS *Oriskany* (CVA 34) ended the recent season in high spirits after winning the Seventh Fleet championship in Yokosuka, Japan.

Twenty-two teams competed in the three-day tournament. *Oriskany* won by defeating USS *Vernon County*

(LST 1161); *Blue* (DD 744); *Castor* (AKS 1); and in the final game, previously undefeated uss *Hector* (AR 7).

Baseball Team Will Tour Japan

A U. S. amateur baseball team will probably be formed to play an exhibition schedule in Japan during the 1964 Olympics this October. Applications for positions on the team are wanted from outstanding amateur baseball players.

Only bona fide amateurs can be considered, and this means you:

- Must not be, or knowingly have become, a professional in any sport.
- Must not have received reimbursement or compensation for loss of salary while engaged in sports.
- Must not have been a teacher receiving remuneration for instruction in physical education or sports.

Your application, sent to the Chief of Naval Personnel (Attn: Pers-G) via your commanding officer, should contain the following information:

- Name, grade or rate and serial or file number.
- Present duty station and date reported.
- Date of expiration of present enlistment, or planned rotation date.
- Home town.
- Height, weight, age and marital status.
- Medical officers statement of your physical qualification.
- Past experience in baseball, including all pertinent data such as AAU, NCAA and YMCA competitions engaged in and last date of competing.
- Statement concerning the suitability of training facilities at your base or readily accessible in your area.

The following specific information should also be included: Position, batting average, fielding average, last season of play, whether right- or left-handed for batting and throwing, and any honors received.

You must sign the following statement and have it certified by your Special Services officer:

"I, the undersigned, declare on my honor that I am an amateur according to the Olympic rules of amateurism and that I fulfill the conditions required by the Olympic rules."

Your application should be submitted in accordance with all other provisions of the *Special Services Manual, NavPers* 15869A, Art. 2115.

FROM THE SIDELINES

CISM PLANNERS gave Navymen a challenge to general physical fitness long before the heavy emphasis on that happy condition was initiated on a nationwide basis.

With the introduction of the naval pentathlon they made it possible for a Navyman to work his way into the international arena without being a one-shot specialist, but by doing what comes naturally—or almost naturally—to a sailor.

The naval pentathlon consists of an obstacle race, lifesaving contest, utility swimming race, a test of seamanship skills, and an amphibious combat race over a 2500 meter course with water hazards, shooting and grenade throwing included.

The first U. S. team entry in this event was in Athens in 1962. This team was organized on short notice and did not fare too well. In our second effort, last year, the U. S. team placed third. This year we hope to do even better, and maybe you can help.



Here are some of the qualifications you must meet to be considered as a team member:

- Run one and one-half miles in nine minutes or less.
- Swim 50 meters, holding an M1 rifle above the water, in 55 seconds or less.
- Swim 100 meters with your clothes on, in two minutes.
- Swim 200 meters, with fins, in three minutes.
- Do 15 pull-ups and 45 push-ups.

After you put yourself to the test, have someone authenticate your results on another trial. A record of your best effort will give the Bureau of Naval Personnel a glimpse of your capabilities.

If you can meet the quals, submit your application via your commanding officer, including the following information:

- Name, rank or rate, and file or service number.
- Duty station, current duty status and anticipated reassignment date.
- Age, height and weight.
- Previous experience in related competitions, if any.
- Statement of medical officer concerning your physical qualification to participate in such competition.
- Best performances on each of the qualifying events listed above.

If you're selected, you will be given the opportunity to participate in screening trials at the Naval Amphibious Base in either Little Creek, Va., or Coronado, Calif. Each coast will select a squad which will remain and train for the final team selections at the U. S. Naval Academy during the period 15-17 July.

For the one catch—you have to perform all the qualifying events within a 48-hour period. But then, that's what makes you an iron man.

BuPers Notice 1710 of 20 Jan 1964 has the scoop, and time is short.

—Bill Howard, JO1,

SERVICESCOPE

Brief news items about other branches of the armed services.

A NEW MASS FREE FALL record has been established by 13 Army and Air Force parachutists who fell nearly eight miles through space before they opened their chutes.

The team members jumped in pairs from an Air Force C-130 transport over El Centro, Calif. Each man fell 41,000 feet during a three-minute, 20-second free fall.

The previous mass free fall record was 36,650 feet, set in 1961 by nine Russian parachutists.

The temperature was 67 degrees below zero when the U. S. jumpers left their plane. Each was equipped with oxygen and wore appropriate cold weather clothing.

Each jumper also carried a sealed barograph which automatically measured variations in atmospheric pressure. These are being studied by the Federation Internationale Aeronautique in Paris, the recognized authority for world aviation records. The barographs testify to the jump and parachute opening altitudes.

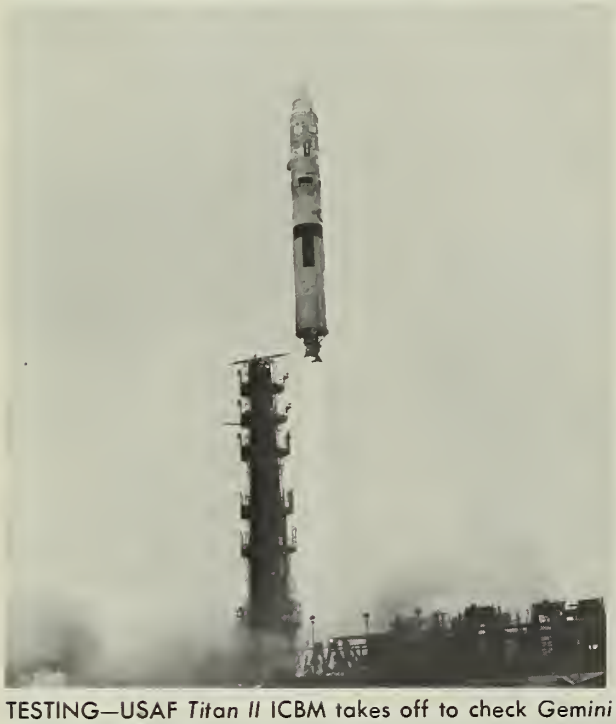
All the U. S. chutists involved in the record jump are undergoing training in Operation Halo (high altitude, low opening).

★ ★ ★

WITH THE NEW YEAR underway, the Coast Guard has taken a look back at its accomplishments in 1963 and revealed that:

• During the year, ships of the Coast Guard Cuban Patrol operating off the coast of Florida rescued nearly 1000 Cuban refugees. The patrol is maintained to prevent violation of United States laws by Cuba-bound raiders.

• As a result of studies about the United States' vulnerability to enemy agents entering the country from the sea, the Coast Guard took steps to coordinate surveillance of the coastlines with state and federal agencies.



TESTING—USAF *Titan II* ICBM takes off to check *Gemini* malfunction detection system and its own exhaust plume.



USCG ICEBREAKER *Northwind* is moored to hummocked ice in Siberian Sea during oceanographic exploration.

• Coast Guard electronic engineers continued to develop and adapt new techniques and devices aimed at reducing hazards at sea. One of the most important of these was the installation of a Long Range Aid to Navigation (Loran) station in Greenland, providing complete *Loran* coverage for the North Atlantic. Four *Loran-C* installations extending to the Sea of Japan were completed in the Pacific, with a fifth under construction. There is a possibility that *Loran-C* may be a forerunner of a world-wide electronic policeman to detect nuclear detonations.

• The Coast Guard saved 1900 persons and answered 37,330 calls for assistance which involved a total property value of nearly $1 billion.

• They examined 4741 merchant vessels with a gross tonnage of 11,261,185; made dry dock inspections of 5725 others, and maintained a continuing check on safety conditions in America's Merchant Marine.

• They administered an intensive small boat safety program and operated nearly 42,000 aids to navigation.

At the same time, the Coast Guard continued to maintain itself in a state of constant military readiness so that it may work effectively with the Navy in the event of an emergency.

★ ★ ★

A MINIATURE RADIO receiver and transmitter has been developed by the Army for use by infantry squads in forward battle areas. It will make voice radio communication possible between squad leaders and their men as well as between squad and platoon leaders.

Formerly radio communication ended with the squad leader who communicated with his men by means of hand signals or voice.

The receiver, which is designed to be pocket carried or helmet mounted, has 13 transistors and seven diodes mounted on printed circuits.

It weighs about nine ounces and is powered by dry cell batteries smaller than those ordinarily used in a pen-sized flashlight.

The batteries give 24 hours of continuous operation



UH-1B HELO from the Army Transportation Board, Fort Eustis, Va., takes off from Williams Field, Antarctica.

and can be replaced in seconds. A 12-inch antenna is made of flexible steel tape.

The transmitter, which must be hand-held, weighs about 15 ounces and can be stowed in a pocket while not in use. It has 12 transistors and also uses printed circuits.

★ ★ ★

THE AIR FORCE is taking a close look at a new chemically powered missile that can be fired from low flying aircraft and go faster and farther than air-to-surface missiles now in use.

The new missile, which is supersonic and is named *Clam* (for Chemical Low Altitude Missile) will be studied under contracts awarded to two aircraft producers by the Air Force Systems Command.

The contracts call for six months of planning studies of *Clam,* including operations analyses and preliminary designs of a complete chemically powered missile system.

★ ★ ★

AN ARMY MEDICAL GROUP has returned from Bolivia where it was sent to help combat a disease called pinta. The Armymen were part of the Middle American Research Unit (MARU).

Because its victims are plagued with red, blue or violet skin discoloration, pinta is also known as the disease of the painted ones. It is caused by a microorganism of the tripanemes or spirochetes family.

The field research investigation was designed to establish clinical and laboratory diagnoses of pinta among residents of four communities along the upper reaches of the Beni River.

The mission accomplished the first steps in the elimination of pinta, but it will be necessary to re-examine the 150 treated persons in a year or so to find out whether or not the persons treated were completely cured.

★ ★ ★

ONE OF MANY rungs in the unclimbed ladder to the moon is being stepped on by 12 Air Force pilots selected to participate in "human reliability" studies involving a simulated lunar landing.

Using a full-scale lunar excursion type space ship, the pilots will land on the "moon" in three-man teams, stay there for seven days gathering information, and return to earth. Four such simulated excursions will be made, each with a different space crew.

The 12 pilots are representative of the astronaut population. Each is a graduate of the Aerospace Research Pilot School and volunteered for the "moon landings" while working with the Air Force Systems Command.

The lunar landing experiments are being conducted in Baltimore, Md., under the direction of the National Aeronautics and Space Administration.

★ ★ ★

NEW TYPE boats adaptable for use in Southeast Asia guerrilla fighting have been unveiled by the Defense Department's Advanced Research Projects Agency (ARPA).

One boat, called the swimmer-support boat, has a very shallow draft with a thick plastic styrofoam shell. Unlike commercial plastic skiffs, it will not sink if punctured: water merely fills the cells around the hole and does not penetrate the whole shell.

The other boat is called the marsh screw vehicle, also designed for use in swampy areas. Two counter-rotating propellers push it at 15 to 25 knots through water or mud.

Arctic tests show it is also excellent for movement through soft snow.

★ ★ ★

A NUCLEAR PROJECTILE which can be fired from a standard 155-mm howitzer has been developed by the Army and the Atomic Energy Commission. The range of the nuclear round will be about the same as for the conventional high explosive shell.

All 155-mm howitzers can fire the atomic shell. Howitzers of that type are used for conventional warfare by infantry and mechanized divisions and armored cavalry regiments.

Both the Army and Marine Corps have received training devices designed to assist in teaching artillery crewmen to assemble and fire the atomic projectile. Actual nuclear ammunition will be available in the near future.



COAST GUARD vessels and helo battle flames on merchant ships after a collision near Buzzards Bay, Mass.

THE WORD

Frank, Authentic Advance Information On Policy—Straight from Headquarters

• MMs IN NUCLEAR PROGRAM—Machinist's mates are now being included in nuclear submarine allowances, and enginemen trained in nuclear propulsion are being permitted to fill MM billets in the surface nuclear propulsion program.

To get the right man in the right billet, enginemen and EN strikers in pay grades E-3 through E-5 in nuclear power plant operator NECs can compete for advancement to either EN in the next higher grade or convert to MM in the next higher grade.

To compete, converting ENs must:

• Volunteer to change ratings.

• Complete the required training courses and practical factors for the alternate rating.

• Have an average of 3.0 or above on all enlisted evaluations for the last two years.

• Be recommended and authorized by their commanding officer to compete in the examination.

Complete information on the mechanics of changing ratings is in BuPers Instruction 1440.5D.

• ATTACK CAG DESIGNATION CHANGED — Attack Carrier Air Groups have been redesignated Attack Carrier Air Wings by the Chief of Naval Operations. The change, effective last December, applies only to those air groups which deploy aboard attack aircraft carriers. Units which embark on support carriers are not affected.

The term "air wing," according to OpNav Notice 5440 of 20 Dec 63, is more descriptive than "air group" when applied to air units embarked in attack carriers. The total number of aircraft in an Attack Carrier Air Group (CAG) is comparable to the number of aircraft in similar air wings of other services. In fact, the Attack Carrier Air Groups often have more diverse capabilities.

Functions, missions and numerical assignments for Attack Carrier Air Wings (CAW) have not changed.

• RATING CHANGE TO AZ—The ratings of over 450 Navymen in the aviation field have been changed to Aviation Maintenance Administrationman (AZ) by a Navy selection board. (The names of the men were published in BuPers Notice 1430 of 23 Dec 63.)

Navymen who were not named in the notice, but who desire to change their rating to AZ, will—if qualified—be placed in in-service training and authorized to compete in the next Navy-wide examination. Requests for such change must be submitted in accordance with BuPers Inst. 1440.5D.

Pay grades of the AZs remain the same as those held before the rating change. Men who were advanced as a result of the August examinations were changed to AZ in their new pay grades.

The BuPers Notice which named the new AZs also announced that Navymen attending service schools in other ratings at the time the notice was issued, and who completed eight or more weeks of schooling by 1 Jan 1964 are ineligible for change even though they were named by the selection board. Navymen on the AZ list who have been issued orders to schools in other ratings will probably have those orders cancelled.

So far, nothing has been published on sea and shore rotation for AZs.

Navymen who are listed in the instruction will be changed to AZ by their commanding officers as soon as they have met typing requirements listed in BuPers Notice 1440 of 22 Jul 1963.

• ALL NAVY CARTOON CONTEST—It's time to submit your cartoons for the Ninth All-Navy Comic Cartoon Contest. The rules are similar to those of preceding years.

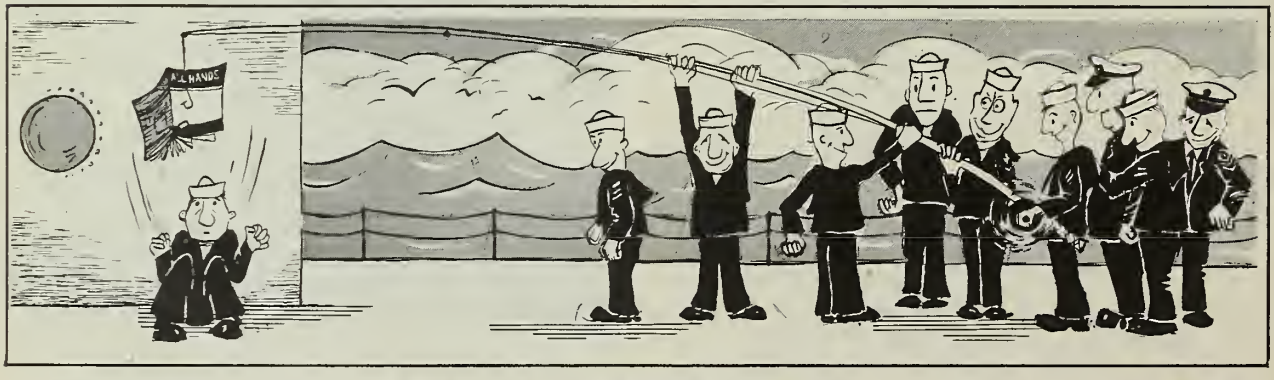
All entries must reach the Chief of Naval Personnel (Attn: Pers G11) by 1 June.

Rules governing the contest were published in BuPers Notice 1700 of Jan 1964. They provide that:

All naval personnel on active duty and their dependents are eligible to submit entries. Comic (gag or situation) cartoons, to be acceptable, must have a Navy theme or background, must be in good taste, and must be suitable for general use. Cartoons must be in black ink on 8-by-10½-inch white paper or illustration board.

You may enter as many cartoons as desired but each entry must contain the following information and statements securely attached to the back of the entry:

Full name of originator; rate/grade; service/file number; duty station; hometown and hometown newspaper; command recreation fund administrator; a brief statement certifying the cartoon is original and



YOU TOO can put ALL HANDS on the line if, when you've finished this copy, you'll promptly pass it on to nine others.

commanding officer's endorsement forwarded, signed either by the commanding officer or his representative.

Type the following statement and sign—"All claims to the attached entry are waived and I understand the Department of the Navy may use as desired." Signed . . . (Name of contestant).

Dependents should supply appropriate data above and should make this statement: "I am the dependent of ..... (Name, rate, grade, etc.).

Awards, furnished by the Chief of Naval Personnel, will be forwarded to the respective commanding officers for presentation to the winners of the first five places. The winning cartoons, plus other leading entries will be published in ALL HANDS magazine and suitable notation will be made in the Special Services Newsletter.

All entries submitted will become the property of the Department of the Navy for use as desired and will not be returned. Good luck.

• **STEWARDS' BILLETS OPENING**—More advancement opportunity to the higher steward rates will be available as a result of continuing efforts on the part of the Chief of Naval Personnel.

The first step was the promulgation of BuPers Inst. 1133.16 in March 1963, which required that all stewards, except senior and master chiefs, who desired to remain on active duty after completing 20 years of active service, submit a request for retention to the Chief of Naval Personnel. The instruction also provided for the establishment of a retention board to consider these requests and decide whether or not permission would be granted.

This action was taken because an exceptionally high steward reenlistment rate, coupled with a continued reduction in petty officer requirements, resulted in a logjam in the higher steward pay grades.

A large group of World War II enlistees are becoming eligible for retirement. Advancement opportunities for lower steward rates would be greatly reduced if the number of those who are eligible for retirement, but who wish to stay for more than 20 years, remains as high as it has in the past.

So the retention board was formed to increase advancement opportunities for the lower rates.

Under the instruction, those who are nearing the completion of 20 years of active service, but whose enlistment expires before they are credited with sufficient active service for retirement, are authorized to reenlist for two, three, four or six years, or extend in yearly increments up to a total of four years. Commanding officers are instructed to limit terms of reenlistment, extensions of enlistment or active duty agreements so that contracts will expire as soon as possible after the completion of 20 years of active duty, "or in any event prior to the completion of 22 years of active duty."

Apparently that latter part of the sentence quoted from the instruction has been misinterpreted in that some individuals are being allowed to obligate themselves up to 22 years when a shorter term should have been effected.

Actually, the intent of the instruction is that individuals will be permitted to complete the *minimum* service for transfer to the Fleet Reserve, but not obligate themselves beyond that time without prior approval of the Chief of Naval Personnel.

This is to be done by employing a combination of the reenlistment and extension periods authorized by the instruction, and also by including all constructive service in the final tally.

In an attempt to clarify this, Change One to BuPers Inst. 1133.16 has been transmitted, directing that the portion of the instruction which reads "and in any event prior to the completion of 22 years of active duty" be deleted.

• **DEPENDENTS' SCHOOLS UNIFIED**—Army, Navy and Air Force dependents' schools have been unified under the policy direction of the Department of Defense.

Each of the services will continue the physical operation of its schools, but all will have uniform standards for selection, assignment and transfer of professional school personnel; centralized procurement of texts.

Armed forces schools provide public school education in grades one through 12 for dependents stationed overseas. There are 222 elementary and 63 junior-senior high schools in 28 countries.

HERE'S YOUR NAVY

Years ago, caribou roamed the rocky reaches of Maine's Maunt Katahdin but, for reasons unknawn, they forsook the safety af the heights; came within range of man's hunting rifles and ceased to exist there.

The state of Maine decided it would again like to have a caribou herd roaming Mount Katahdin, and arranged to swap 400 Maine grouse for 24 Newfoundland caribou.

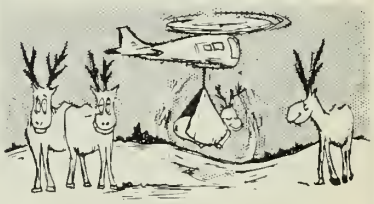
Newfaundland game rangers rounded up 18 does and six stags in the interior of their country and shipped them to a corral at Togue Pond, at the base of Mount Katahdin. It was up to 16 Navymen of Helicopter Utility Squadron 4, from the Naval Air Station at Lakehurst, N. J., to airlift them to the craggy heights in two helicopters.

From a caribou's point of view, Mount Katahdin approaches paradise. There is plenty af lichen—moss which caribou like ta eat; it is cold, and best of all, there are no people.

Helicopter pilots, however, take a different view of Maine's highest mountain. To them, its rocks and treacherous air currents were distinctly unfriendly.

Weather was a problem too, holding up the operation several days.

Each beast was felled with a dart-shaped tranquilizer pellet, and 12 minutes later was snoring lustily.



The caribou were placed in wooden cradles; their legs were trussed; and they were blanketed with canvas and airlifted to their new hame, where they were untrussed and left to awaken.

The airlift lasted one day, as caribau after caribou sailed serenely aut af the Togue Pond corral ta Katahdin's heights and a happier land than he had known.

As the day wore on, however, the weather worsened, and six does still remained in the corral. The jet helas just beat the storm to Tague Pond, returning five men from the drop area with the news that the herd was in good candition and had taken off far even higher rocks.

The weather showed no sign of moderating aver Katahdin, so the Navymen had to return to Lakehurst leaving six daes still corralled at Togue Pond.

When the weather maderated, they were taken as high as possible by truck, with the near certainty that they would join the remainder of the herd.

THE BULLETIN BOARD

One-Year Tours Scheduled For Gitmo as Dependents Are Ordered to Stay Home

Dependents may no longer accompany United States personnel to the U. S. Naval Base at Guantanamo Bay, Cuba.

Dependents of U. S. personnel already in Cuba will depart gradually during the next two years.

Here's what this announcement means to Navy families now in Cuba, and what to expect with regard to tour lengths at Gitmo.

- Effective 12 Feb 1964, all new assignments to Guantanamo Bay are for one-year "without dependents" tours.
- No dependents already at Guantanamo Bay are being evacuated. Dependents are leaving the base gradually as their Navymen-sponsors are transferred after normal two-year "with dependents" tours.
- No extensions will be granted those now at Guantanamo Bay with dependents. Exceptions to this may apply in cases of families with school age children. (Brief extensions may be granted to afford children an opportunity to finish certain phases of schooling without interruption.)

The new one-year tour for all Navymen assigned to Gitmo minimizes the time those who have dependents must be separated from their families.

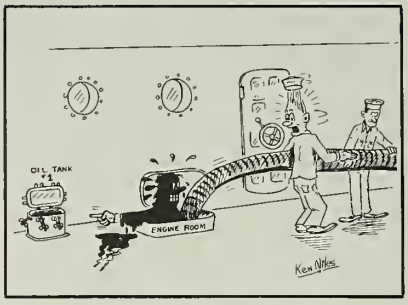
Those without dependents likewise serve for one year, the standard "without dependents" tour at a number of remote stations.

The new tour and dependent withdrawal rulings apply to all U. S. personnel assigned to Guantanamo Bay, including civilians.

Within the next six months, approximately 800 of the 3000 dependents (military and civilian) now at the base will have returned to the U. S. under the phasing out. All dependents will have departed by early 1966.

Last dependents to leave will be those who arrived shortly before the new order was issued, and became effective, on 12 Feb 1964..

All-Navy Cartoon Contest
Kenneth O. Niles, RMC, USN



"Not here stupid—back there!"

Three New and Four Revised Correspondence Courses Ready

Seven correspondence courses have been issued and are available through the Naval Correspondence Course Center, Scotia, N. Y. Of the seven, four are revised courses and three are new issues. The seven are:

- OCC *Public Works Department Management*, NP 10741-A (supersedes NP 10741).
- OCC *Refresher Course for Meteorologists*, NP 10953-A (supersedes *Refresher Course for Aerologists*, NP 10953).
- OCC *Oceanography in ASW*, NP 10418 (Confidential).
- ECC *Radioman 1 & C*, NP 91405-3 (supersedes NP 91405-2).
- ECC *Sonarman (S) 3 & 2*, NP 91259-3 (Confidential).
- ECC *Communications Technician (I) 3 & 2*, NP 91572 (Confidential).
- ECC *Utilitiesman 3 & 2*, NP 91594-2 (supersedes NP 91594-1A).



"Where do you do your fishing?"

Here's Report on Navy Facilities to Be Closed And Workloads Shifted

Several naval installations will shift their workloads—and some personnel—to different locations during the next three and one half years. The changes are the result of Department of Defense economy measures which will call for discontinuation or reduction of 33 defense installations.

However, only six stateside Navy installations are included. Most of the changes scheduled for the Navy will consist of the suspension of work at some facilities and increased operations at others.

The largest change for the Navy will be the shift of ship repair work from the Naval Repair Facility, San Diego, Calif., to the Long Beach Naval Shipyard at Long Beach, Calif. This workload transfer will be completed in January 1965, after a one year phasing-out period.

Litchfield Park Naval Air Facility in Arizona, where Navy planes have been preserved since the end of World War II, and the Navy Storage Activity Stockton Annex, Stockton, Calif., will be closed. Preservation operations for Navy aircraft, however, will continue at a different location. After a three year phasing-out period ending in June 1967, Navy aircraft will be mothballed with Air Force inactivated aircraft at Davis-Monthan Air Force Base in Tucson, Ariz. The Stockton Navy Storage Activity will be closed by December 1965, but the Stockton communications station at the same location will remain in operation.

Other Navy installations scheduled for closure after relocation of workloads are the Navy Forms and Publications Supply Office at Byron, Ga., and the Navy Training Device Center at Port Washington, N. Y. The Training Device Center will shift to former Mitchel Air Force Base, N. Y., now the Federal Center, and the responsibilities held by the Publication Supply Office will be transferred to the Naval Supply Depot, Philadelphia, Pa., by September 1964.

The Naval Air Facility at Eliza-

beth City, N. C., where 25 Navymen are stationed, will be inactivated by January 1965.

The Defense Department's economy measures are a result of a 1963 review of the military base system. It was found that changes in weapons systems, organizational structure, and supply management concepts had reduced the need for some facilities. Also, reductions in inventory achieved through more precise determination of requirements and increased utilization of excess material in lieu of new procurement have freed the working capacity at major depots.

As a result, workloads at some facilities can be redistributed to other, more modern and efficient installations to save personnel and overhead costs.

Incorrect Social Security Numbers Can Give Finance Center (and You) Headache

When Navymen were placed under the provisions of the Social Security Act in 1957, the Navy Finance Center at Cleveland, Ohio, began having problems, for it receives thousands of pay records each year with incorrect or missing Social Security numbers.

Since the numbers are needed for crediting the proper accounts with taxes withheld, the Finance Center must spend considerable time, money and effort in tracking them down.

Requests for missing numbers are sent to disbursing officers twice a year by the Finance Center, when closed pay records are compared with the flimsy copies of newly opened ones. Navy Regional Finance Centers issue similar requests. In most cases it is still necessary to send follow-up notices.

Much of this work could be eliminated if disbursing offices followed directions on obtaining Social Security numbers, either from the individual or the Social Security Administration. These instructions are contained in paragraphs 044433-9b and -9c of the Navy *Comptroller Manual*.

Besides fighting the problem of the missing numbers, the Finance Center must tackle some 30,000 cases a year involving incorrect Social Security numbers. In each of these cases the center must send out a request to the local disbursing officer, asking him to examine the individual's Social Security account card and correct the error. If this request brings no reply a follow-up notice must be sent.

In some cases, the disbursing officer responds to this by sending back the same number that's on the individual's pay record, even though this is known to be incorrect. Needless to say, this creates additional correspondence for the Finance Center, which has to send the disbursing officer a request for a recheck—and perhaps—a follow-up to that request.

Meanwhile, back at the Finance Center, there's another cycle of correspondence between the Center and the Social Security Administration.

Many of these headaches can be cured at income tax time, when you, the man in the Fleet, receive your Statement of Taxes Withheld (Form W-2). All you have to do is check the W-2 against your Social Security card and, if there is a mistake on the W-2, let your disbursing office know about it. Or, if you've just recently been assigned a Social Security number, you can make sure the disbursing office also has a record of it.

After all, who wants his Social Security withholdings credited to someone else's account?

HOW DID IT START

Floating Drydocks

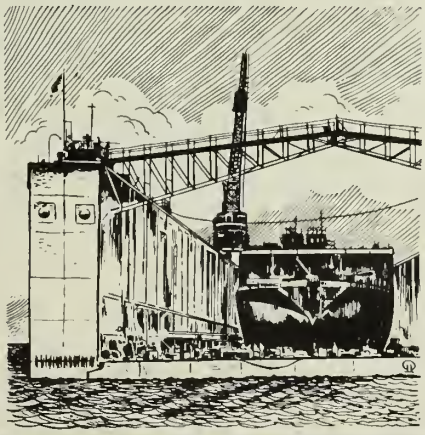
An ingenious English ship's captain built the first floating drydock during the reign of Peter the Great, about 1700.

There wos nothing fancy about this first dock on record, but it worked well. His ship in serious need of hull repairs, and with no nearby facilities for careening (tilting o ship on its side), the captain bought an old hulk which he gutted completely and fitted with a watertight stern gate.

He then filled the hulk with water, berthed his ship inside, and pumped the water out so that his crew could moke the necessory repairs.

This type of dock was used, off ond on, for the next 150 years. It wos known as a camel dock, after the nome of the hulk bought by the English captoin.

The first floating drydock to be built specifically as such was launched in 1785. This type of floating drydock, built of timber, losted for a surprisingly long time. The 1785 dock is known to have been in use at least 44 yeors after its launching.



The next step in the evolution of the floating drydock come in 1809, when a patent was gronted for an iron dock, with hollow sides for added buoyoncy. However, 39 years passed before the first hollow drydock was actuolly constructed in 1848 (of timber).

About 1866 an iron dock was built by James Campbell in Bermuda. It held the "largest" record for many years and remoined in use until 1905. Campbell's dock wos 381 feet long and hod a lifting capacity of 10,000 tons.

From time to time any floating vessel must be hauled out of the water for repainting, or its bottom will rust away. So, with the construction of iron floating drydocks, came a perplexing problem which, at first, seemed without o solution.

The problem? No drydock was large enough to dock o flooting drydock.

Consequently, the first of the self-docking drydocks were built soon ofter the advent of metol docks. These consisted of severol sections, any one of which could be lifted out of the woter by the other sections.

Improvements continued to be made ond, during World War I, the floating drydocks proved their worth in conducting on-the-spot hull repairs in forward areos.

The granddaddy of all floating drydocks wos built by the Navy at Pearl Horbor ond lounched in July 1943. Designoted AFDB 1, it was 927 feet long and could drydock on Essex-class aircroft carrier. AFDB 2, of the some size, wos built soon ofter ond wos followed by five other, smaller, AFBD's. AFDB number seven is the only one of the closs still in use today. The others ore port of the inactive fleet.

Smoller flooting drydocks, however, are presently used throughout the Fleet to drydock submorines, destroyers and smoller ships.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Instructions

No. 1210.12 – Provides information regarding application for change of designators by temporary and Reserve officers on active and inactive duty.

No. 1301.34B–Contains new instructions concerning the Officer Data Card (NavPers 2626).

No. 1501.98–Specifies an additional eligibility requirement for first enlistment personnel wishing to attend the MK-68 Fire Control System Class "C" course.

No. 1520.88A–Describes the procedures whereby interested officers may apply for assignment to the naval nuclear power training program which convenes quarterly at the nuclear power schools at Bainbridge and Mare Island.

No. 4650.14 – Establishes procedures for arranging transportation for military personnel traveling under official orders from the United States to overseas destinations including Alaska, Hawaii and units employed overseas.

Notices

No. 1710 (10 January)–Provided detailed information necessary to the conduct of the 1964 All-Navy sports championships.

No. 1540 (15 January)–Provided advance information on a forthcoming change to the *BuPers Manual* relative to the designation and tenure of qualification for Explosive Ordnance Disposal personnel.

No. 1306 (16 January) – Announced the sea duty commencement cutoff dates which establish the eligibility of enlisted personnel for Seavey Segment 2-64 and announced new shore tour lengths for personnel in certain Segment Two rates who will commence their shore tour on or after 1 October.

All-Navy Cartaan Cantest
Peter A. Hansen, EN1, USN



"Uh hum—and haw lang have yau had this feeling af being an aircraft carrier?"

No. 1221 (17 January)–Alerted commands to the March distribution of the *Manual of Navy Enlisted Classifications* (NavPers 15105 F) which replaces NavPers 15105E.

No. 1710 (20 January) – Described qualifications for the 1964 CISM Pentathlon.

No. 1700 (22 January) – Announced the ninth All-Navy comic cartoon contest.

No. 1520 (24 January)–Solicited applications from USN and Marine Corps officers and midshipmen of the Naval Academy for Navy sponsorship in the December 1964 Rhodes Scholarship competition.

No. 1531 (24 January)–Provided authority to nominate enlisted USN personnel and USNR personnel on active duty to participate in the Navy-wide examination for assignment to the Naval Preparatory School as candidates for appointment to the Naval Academy.

No. 1520 (29 January)–Invited eligible junior officers to apply for Navy flight training.



"Boy, this physical fitness pragram really works!"

List of New Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

55 Days at Peking (2518) (C) (WS): Drama; Charlton Heston, Ava Gardner.

The Running Man (2519) (C) (WS): Melodrama; Laurence Harvey, Lee Remick.

Under the Yum Yum Tree (2520) (C): Comedy; Jack Lemmon, Carol Lynley.

My Son the Hero (2521) (C): Adventure Drama; Pedre Armendariz, Jacqueline Sassard.

Branded (2522): Action Drama; Alan Ladd, Mona Freeman.

Fortunes of Captain Blood (2523): Adventure Drama; Louis Hayward, Patricia Medina.

Off Limits (2524): Comedy; Bob Hope, Marilyn Maxwell.

The Golden Hawk (2525): Drama; Rhonda Fleming, Sterling Hayden.

Hell's Island (2526): Drama; John Payne, Mary Murphy (Re-Issue).

Incendiary Blonde (2527): Betty Hutton, Arturo De Cardona (Re-Issue).

State of the Union (2528): Spencer Tracy, Katherine Hepburn (Re-Issue).

Assignment Paris (2529): Dana Andrews, Marta Toren (Re-Issue).

Rogues Regiment (2530): Dick Powell, Marta Toren.

My Favorite Spy (2531): Bob Hope, Hedy Lamarr.

Palm Springs Weekend (2532) (C): Troy Donahue, Connie Stevens.

Cavalry Command (2533) (C): John Agar, Richard Arlen.

Warpath (2534): Edmond O'Brien, Dean Jagger (Re-Issue).

Shane (2535): Alan Ladd, Jean Arthur (Re-Issue).

Act of Murder (2536): Edmond

O'Brien, Frederic March (Re-Issue).

A Connecticut Yankee in King Arthur's Court (2537): Bing Crosby, Rhonda Fleming (Re-Issue).

Who's Minding the Store (2538) (C): Jerry Lewis, Jill St. John.

Gunhawk (2539) (C): Rory Calhoun, Rod Cameron.

Tomorrow at Ten (2540): John Gregson, Robert Shaw.

Strait Jacket (2541): Joan Crawford, John Anthony Hayes.

Any Number Can Win (2542) (WS): Jean Gabin, Alain Delon.

Summer Holiday (2543) (C) (WS): Musical; Cliff Richard, Lauri Peters.

Lassie's Great Adventure (2544) (C): Hugh Reilly, June Lockhart.

Stolen Hours (2545) (C): Drama; Susan Hayward, Diana Baker.

Going My Way (2546): Drama; Bing Crosby, Barry Fitzgerald (Re-Issue).

Let's Dance (2547): Musical Comedy; Betty Hutton, Fred Astaire (Re-Issue).

Appointment with Danger (2548): Action Drama; Alan Ladd, Phyllis Calvert (Re-Issue).

The Exile (2549): Melodrama; Maria Montez, Henry Daniell (Re-Issue).

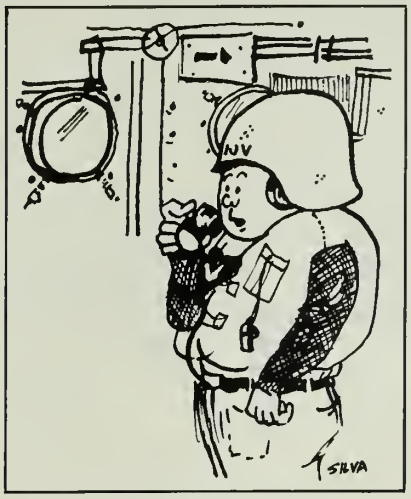
Courses Offered to Qualified Officers in Field of Communications Engineering

For the first time, officers will soon have the opportunity to pursue Navy education in communications in a three-year graduate level program leading to a master's degree in communications engineering. This is made possible through extension of the present two-year Communications Engineering curriculum at the U. S. Naval Postgraduate School, Monterey, Calif. to include a third year of instruction.

With the communications field becoming increasingly complex, the Navy needs highly educated communications engineers with strong backgrounds in management and analysis, as well as in engineering. The new program is designed to produce these specialists.

The highest level of Navy education in this field at present is the two-year postgraduate course in communications, administered by the Postgraduate School, which offers a bachelor of science degree in communications engineering. This course of instruction was begun in 1959.

R. L. Silva, PN3, USN



"Deposit $2.60 for the next three minutes, please."

The first class to pursue the three-year curriculum will consist of approximately 10 officers. They will be selected from among those officers who enrolled in the two-year communications engineering curriculum, August 1963 class.

Their selection will be based on academic capability as well as their availability for an extra year at the Postgraduate School. Those officers selected will remain under instruction at the Postgraduate School until June 1966. The third year will include study in: engineering electronics; computer technology and programing; management and operations analysis and various other subjects.

Preliminary evaluation indicates that 34 billets currently require graduate communications engineers. Those engineers with advanced education will be utilized in billets involving systems plans, shore and fleet systems requirements, shore programs (new construction), communications material, compatibility engineering, and systems facilities and installations, as well as billets approved for the Defense Communications Agency.

The new three-year graduate curriculum in Communications Engineering was approved by the Chief of Naval Personnel subsequent to justification of the need by the Director, Naval Communications at the 1963 annual Postgraduate Conference, held at Monterey in August.

Officers who sub-specialize in communications will receive full opportunity to reach line command.

Navymen Are Old Hands at New Languages

Foreign language training for Navymen is nothing new. Records of Navymen studying foreign language as part of their duties go back many years. However, it wasn't until World War II that language training for the Man in the Fleet got underway on a large scale.

From 1923 to 1940, a small group of Regular Navy and Marine Corps officers were trained in Japanese or Chinese, at schools in the Orient. Both courses were extensive, requiring three years of study.

In September 1941, the Navy started its own Japanese language courses at Harvard and the University of California. These were later consolidated to form the Naval School of Oriental Languages at the University of Colorado.

In 1944, Chinese, Russian and Malay were added, and in April 1945, an additional Naval School of Oriental Languages was established at Oklahoma A & M.

Between 1941 and 1946, approximately 1250 language officers were graduated in Japanese, Chinese, Russian and Malay, and the time of all courses was shortened by highly intensive training methods. For example, the three years of study previously required to master Japanese was shortened to one.

Thus, according to Navy language officials, the Navy pioneered the "cram" method of teaching foreign languages.

In 1946, the Naval Intelligence School was established in Washington, D. C., and language training for Navymen was shifted to the Intelligence School.

The Navy Language School remained under Naval Intelligence until 1 July 1963, when it was officially absorbed by the Defense Language Institute.

This Is Sure to Keep You in Touch with Your Home State

CERTAIN STATES, territories and possessions of the United States have their own income tax laws under which you may have liabilities in addition to the federal income tax (discussed in the December 1963 issue). Below, you will find a summary of the requirements of the local income tax laws, as prepared by the Office of the Judge Advocate General.

You should note that unless your state makes a special exception, members of the armed forces are not excused from state and local income taxes merely because they are on active duty.

Generally speaking, your liability for state and local income and personal property taxes (but not real property taxes such as on your home) is determined on the basis of the laws of your domicile or legal residence, sometimes referred to as your home state or the state of which you are a citizen or inhabitant.

Most state taxes are based on actual residence or presence in the jurisdiction and for this reason the Soldiers' and Sailors' Civil Relief Act is important to you. Although it protects you from taxation by a state of which you are not a resident, it does not relieve you from liability for taxes to your home state. There is no exemption by reason of being in the naval or military services unless your home state law provides such.

Active service personnel are protected to the extent provided by the Soldiers' and Sailors' Civil Relief Act. This Act provides that, for the purpose of taxation of your individual income and personal property, including your automobile, if you are absent from your place of legal residence or domicile solely by reason of compliance with military or naval orders, you will not be considered to have become a resident of any other state or possession of the United States while so absent.

In this situation your active service pay and personal property are exempt from taxation in the state in which you are serving but they retain their taxable status in your home state. So is your automobile, if the license, fee or excise imposed by your home state is paid.

There is no tax exemption under the Act for retired and retainer pay; your wife's income, property, or automobile; or income from a business, rental property or other source, such as part-time employment, in the state in which you are living by reason of active duty orders.

In many cases, tax authorities have taken the position that a serviceman has abandoned his original domicile when there is a showing that the right to vote in his home state has not been exercised and that a home state's income taxes, if any, have not been paid.

Because of this, it is much easier to substantiate your domicile in your home state if the required taxes have been paid, your voting privilege has been exercised and other ties to the home state, such as automobile license plates and operator's permit have been kept current while you are on active duty.

Below you will find a summary of the salient features of the income tax laws for the calendar year 1963 of the states and possessions of the United States. It primarily indicates the requirements for the filing of income tax returns by servicemen who are residents of jurisdictions having income tax laws; personal exemptions and tax credit allowed; and dates for filing and paying taxes.

All-Navy Cartoon Contest
LTJG Poul T. Nogano, SC, USN



"Oh that?—It's the disbursing officer back from his money run."

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES

NOTE: 1. "Married couple" or "married" as used in this summary means husband and wife living together.

2. A married servicemon or womon is considered to be living with his or her spouse when separated only by reoson of military orders.

3. "*" indicotes provisions for declaration ond poyment of estimoted taxes.

4. The following stotes do not impose individuol income toxes on residents generally: Connecticut, Florida, Illinois, Maine, Michigan, Nebroska, Nevada, New Jersey, Ohio, Pennsylvanio, Rhode Islond, South Dakota, Texas, Washington, and Wyoming. New Jersey imposes o "commuter tax."

5. Under section 513 of the Soldiers' and Sailors' Civil Relief Act (50 USC App. 573) a member may defer payment of taxes without interest or penalty, until 6 months ofter dischorge if ability to poy is moteriolly impoired by reason of active service. Returns must be filed on time, however.

Lowest Amount Of Income Which Requires Residents to File Returns	*Personol Exemptions and Tox Credits*	*Due Dote for Return ond Poyments*	*Title ond Address of Toxing Authority*	*Exclusions ond Deferments for United Stotes Armed Forces Personnel*
*ALABAMA: Net income of: $1500 it single, $3000 if married or head of fomily.	$1500 if single, $3000 it morried or heod of fomily, $300 for each dependent.	Return and payment due 15 April.	State Deportment of Revenue, Income Tax Division, Montgomery 2, Ala.	Members outside continental United States may defer filing until 30 days after they return to the U. S.

Lowest Amount Of Income Which Requires Residents to File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
*ALASKA: Gross income of $600 from sources within the state.	Same as federal.	Return and payment due 15 April.	Department of Revenue, Alaska Office Building, Juneau, Alaska.	All active-service pay exempt after 1950.
ARIZONA: Net income of: $1000 if single, $2000 if married. Gross income of $5000.	$1000 if single; $2000 if married or head of household; $500 additional if blind; $1000 if 65 or older; $600 for each dependent.	Return due 15 April. Payment with return or in three equal installments.	Arizona State Tax Commission, Income Tax Division, State House, Phoenix, Arizona.	$1000 active-service pay is exempt. Members outside continental United States may defer filing and paying, without interest or penalty, until 180 days after release or termination of present emergency, whichever is earlier.
ARKANSAS: Gross income of: $1750 if single or separated from spouse, $3500 if married or head of family.	Tax credit of $17.50 if single, $35 if married or head of family, $6 for each dependent.	Return due 15 May. Payment with return or in two equal installments.	State of Arkansas, Department of Revenue, Little Rock, Ark.	All active-service pay is excluded.
**CALIFORNIA: Net income of $1500 if single or head of household, $3000 if married.	$1500 if single, $3000 if married or head of household, $600 for each dependent, $600 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return.	State of California, Franchise Tax Board, 1025 P Street Sacramento 14, Calif.	$1000 active-service pay and all mustering-out and terminal leave payments received after 1 July 1952 are exempt. Filing and paying deferred without penalty or interest until 180 days after return to the U.S. from duty outside the 50 States.
**NOTE: Domicile of service wife, if not a Californian, does not follow that of husband for tax purposes until both return to state. Attach statement explaining the residence status of wife.				
*COLORADO: Gross income of $750.	$750 for taxpayer; $750 for spouse; $750 additional for taxpayer and spouse if blind, 65 or older, $750 for each dependent.	Return and payment due 15 April.	State of Colorado, Department of Revenue, State Capitol Annex, Denver 2, Colorado.	$2000 of active or reserve duty pay excluded during war or national emergency; $1000 during other times. ($2000 applies in 1963) Returns and payment of tax deferred without penalty or interest until year after separation.
*DELAWARE:** Gross income of: $600 if single or separated from spouse, $1200 combined gross income of married couple.	$600 for taxpayer; $600 for spouse; $600 for each dependent; $600 additional for taxpayer and spouse if blind or 65.	Return and payment due 30 April.	State of Delaware, State Tax Department, 843 King Street, Wilmington 99, Del.	Deferment for filing and paying may be granted upon application, until six months after discharge.
**NOTE: §1101(7) of the Delaware Income Tax Law provides in part: " 'Resident' means only natural persons and includes any person domiciled in the state, except a person who, though domiciled in the state, maintains no permanent place of abode within the state, but does maintain a permanent place of abode without the state, and who spends in the aggregate not to exceed 30 days of the taxable year within the state; . . ."				
*DISTRICT OF COLUMBIA: Gross income in excess of $1000 if single or separated from spouse, $2000 combined income of married couple.	$1000 if single or separated from spouse; $2000 if married; $1500 if head of family; $500 for each dependent; $500 additional for taxpayer and spouse if blind or 65.	Return and payment due 15 April.	District of Columbia, Finance Office, Revenue Division, Municipal Center, 300 Indiana Ave., N.W., Washington 1, D. C.	Upon application, deferment for filing or paying granted members outside the United States until six months after the return is due; one year for members outside conus.

Lowest Amount Of Income Which Requires Residents to File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferments for United States Armed Forces Personnel
*GEORGIA: Gross income of $1500 if single or separated from spause. $3000 combined gross income of married couple.	$1500 if single; $3000 if married or head of family; $600 for each dependent (except one for head of family); $600 additional for taxpayer and spouse if blind or 65.	Return and payment due 15 April.	Department of Revenue, Income Tax Unit, State Office Building, Atlanta 3, Georgia.	Deferment for filing or paying without penalty or interest granted members outside continental U. S. until 6 months after return to the U. S.
*GUAM: Same as federal.	Same as federal.	Same as federal.	Division of Revenue and Taxation, Department of Finance, Government of Guam, Agana, Guam.	Same as federal, however, as to service compensation, the government of Guam in practice has not imposed the Guam income tax on individuals subject to US income tax.
*HAWAII: Gross income of $600 ($1200 if 65 or older) from sources within the state.	Same as Federal except $5000 in lieu of normal exemption for blind taxpayer.	Net income tax: Return and payment due 20 April.	Hawaii Director of Taxation, 425 Queen St., Honolulu 13. Hawaii.	All service pay excluded.
IDAHO: Gross income of $600 ($1200 if 65 or older).	Same as federal.	Return and payment due 15 April.	State of Idaho Office of Tax Collector, Income Tax Division, State Capitol Building, Boise, Idaho.	Same as federal, except if outside the continental United States may defer filing and paying until 6 months after discharge.
*INDIANA: — Gross income tax 1 Jan-30 Jun 1963 for individuals — Gross income in excess of $1000. Joint returns not permitted.	$1000 for each taxpayer.	Return and payment due 31 January; or quarterly if over $25 any quarter.	Indiana Department of State Revenue, Gross Income Tax Division, State Office Building, 100 N. Senate Avenue, Indianapolis 4, Ind.	All active and inactive service pay is exempt. Returns and payment of tax deferred until 6 months after discharge or end of hostilities, whichever is earlier.
— Adjusted gross income tax effective 1 July 1963 (1963 rates are ½ of full year rate) — Gross income in excess of $1000.	$1000 for taxpayer on separate return; Lessor of $1000 or adjusted gross income of each spouse (minimum of $500 each) on joint return. $500 additional for taxpayer and spouse if blind, 65 or older; $500 for each dependent.	Return and payment due 15 April.	Indiana Department of State Revenue, Gross Income Tax Division, State Office Building, 100 N. Senate Avenue, Indianapolis 4, Ind.	Same as federal.
IOWA: Net income of $1500 or more if single or separated from spouse; $2350 or more if married, or married couple with combined net income of $2000 or over if filing separate return.	Tax credit of: $15 if single, $30 if married or head of family, $7.50 for each dependent; $15 additional if blind or 65.	Return due 30 April. Payment with return or in two equal installments if over $50.	State Tax Commissian, Income Tax Division, State Office Building, Des Moines 19, Iowa.	No service pay exemption. 90 day extension granted upon timely application with additional time for good cause.

Lowest Amount Of Income Which Requires Residents to File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
KANSAS: Net income of: $600 if single or separated from spouse, $1200 if married. (Plus age and blind exemptions.) Gross income of $4000.	Same as federal except that $600 income limitation applies to child of any age unless a student.	Return due 15 April. Payment with return or in two equal installments if tax is more than $200.	State of Kansas Director of Revenue, Income Tax Division, State Office Building, Topeka, Kansas.	$1500 active-service pay excluded from gross income until the termination of the present world crisis as determined by the Executive Council of the State.
*KENTUCKY: Net income of: $1000 if single or separated; $2000 if married, head of household, blind, or age 65. Gross income of $1200 and $2500 respectively.	Tax credit of: $20 for taxpayer, $20 for spouse, $20 for each dependent, $20 additional for taxpayer and spouse if 65 or blind.	Return and payment due 15 April.	Commonwealth of Kentucky, Department of Revenue, Frankfort, Ky.	None.
*LOUISIANA: Net income of: $2500 if single or separated from spouse, $5000 if married. Gross income of $6000 or more.	$2500 if single, $5000 if married or head of family, $400 for each dependent (except one for head of family). Plus $1000 per person, including dependents, who are blind, mentally retarded or have lost a limb.	Return and payment due 15 May.	State of Louisiana, Collector of Revenue, Baton Rouge 1, La.	None.
*MARYLAND: Gross income in excess of: $800 if single, $1600 if married.	$800 if single; $1600 if married; $800 each dependent, (including one under a multiple support agreement); $800 if blind, 65 or older, also for dependents 65 or older.	Return and payment due 15 April.	State of Maryland, Comptroller of the Treasury, Income Tax Division, Annapolis, Maryland.	$1500 of active-service pay excluded during time of war and prior to cessation of hostilities or while in a combat zone. (No exclusion in 1963) Members outside continental United States may defer filing until 3 months after return to the U. S.
*MASSACHUSETTS: Earned income of $2000. Other taxable income in any amount.	$2000 for taxpayer against earned income, $500 for spouse having income of $2000 or less, $400 for each dependent, $2000 additional for taxpayer and spouse if blind.	Return and payment due 15 April.	The Commonwealth of Massachusetts, Department of Corporations and Taxation, Income Tax Bureau, 14 Court Square, Boston 8, Mass.	If requested and if for due cause, an extension of time for filing may be granted up to 6 months.
*MINNESOTA: Gross income in excess of $750 if single or head of household, $1500 combined income of husband and wife if married.	Tax credits of $10 if single, additional $10 if blind, 65 or older; $30 if married, additional $15 if blind, 65 or older; $30 if head of household, additional $10 if blind, 65 or older; $15 for each dependent.	Return due 15 April. Payment of balance due in full with return.	State of Minnesata, Department of Taxation, Income Tax Division, Centennial Office Bldg., St. Paul 1, Minn.	$3000 active service or Reserve duty pay excluded, plus mustering out pay. Members outside CONUS for more than 90 days may defer filing and paying until six months after return.
MISSISSIPPI: Net income in excess of personal exemptions. Gross income in excess of $6000.	$5000 if single, $7000 if married or head of family.	Return due 15 April. Payment with return or in four equal installments.	State Tax Commission, Income Tax Division, Box 960, Jackson, Miss.	None.

Lowest Amount Of Income Which Requires Residents to File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
*MISSOURI: Gross income of $1200 if single, $2400 if married or head of family.	$1200 if single, $2400 if married or head of family, $400 for each dependent.	Return and payment due 15 April.	State of Missouri, Department of Revenue, Income Tax Department, P.O. Box 329, Jefferson City, Mo.	$3000 of active-service pay exempt after 1950. Director of Revenue may allow extension of time for filing without penalty or interest until one year after discharge.
*MONTANA: Gross income of $600 if single, $1200 if married.	$600 if single; $1200 if married; $600 for each dependent; $600 additional for taxpayer and spouse if blind or 65.	Return and payment due 15 April.	State of Montana, Board of Equalization, State Capitol Building, Helena, Mont.	None.
NEW HAMPSHIRE: Any amount of taxable interest or dividends. Joint returns not permitted.	$600 for each taxpayer.	Return and payment due 1 May.	State Tax Commission, Division of Interest and Dividends, Box 345, Concord, N.H.	None.
NEW JERSEY: Gross income in excess of personal exemptions if derived from N. J. by N. Y. resident.	Same as federal, plus tax credit of: $10 if single; $12.50 if married and filing separately; $25 if married and filing jointly, or head of household.	Return and payment due 15 April.	New Jersey State Emergency Transportation Tax Bureau, Division of Taxation, Trenton 25, N. J.	All active service pay exempt. Persons in active service with the armed forces of the United States who may be prevented, by distance or injury, or hospitalization arising out of such service, may be allowed an extension of six months for filing.
NEW MEXICO: If federal income tax return is required to be filed.	Same as federal.	Return due 15 April. Payment with return or in four equal installments.	State of New Mexico, Bureau of Revenue, Income Tax Division, P.O. Box 451, Sante Fe, N. M.	None.
*NEW YORK:** If federal income tax return is required to be filed or if New York adjusted gross income exceeds exemptions.	Same as federal, plus tax credit of: $10 if single, $12.50 if married and filing separate returns, $25 if married and filing joint return; head of household or surviving spouse with a dependent child.	Return and payment due 15 April.	New York State Income Tax Bureau, Gov. A. E. Smith State Office Building, Albany, N. Y. 12225	None, except as provided in Sec. 605(a) of N. Y. Income Tax Law quoted below for members who satisfy all three conditions therein. N. Y. instructions state that living in government quarters is not maintaining a permanent place of abode.
*NORTH CAROLINA: Gross income of $1000 if single or a married woman with separate income, $2000 if a married man. Gross income from business or profession in excess of personal exemption.	$1000 if single or a married woman, $2000 if married man or head of a household, $2000 if widow or widower with minor child, $300 for each dependent, $1000 additional to blind taxpayer.	Return due on or before 15 April. Payment with return for any portion not paid in advance by withholding or estimated taxes.	State of North Carolina, Department of Revenue, Individual Income Tax Division, Raleigh, North Carolina.	None.

**NOTE: Sec. 605(a) of the New York State Income Tax Law provides in part: "A resident individual means an individual: (1) who is domiciled in this state, unless he maintains no permanent place of abode in this state, (2) maintains a permanent place of abode elsewhere, and (3) spends in the aggregate not more than thirty days of the taxable year in this state, * * *"

Lowest Amount Of Income Which Requires Residents to File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
NORTH DAKOTA: Net income of $600 if single or separated from spouse, $1500 if married or head of household. Gross income of $5000.	$600 if single; $1500 if married or head of household; $600 for each dependent; $600 additional for taxpayer and spouse if blind, 65 or older.	Return due 15 April. Payment with return or in installments if tax exceeds $100.	State of North Dakota Office of Tax Commissioner, State Capital Building, Bismarck, North Dakota.	All active-service pay is exempt.
OHIO: No individual State income tax, but residents of some Ohio cities and municipalities may be liable for local income taxes. Canton, Cincinnati, Columbus, Dayton, Springfield, Toledo and Youngstown exempt all military pay.				
***OKLAHOMA:** Gross income of $1000 if single, $2000 if married.	$1000 if single, $2000 if married or head of family, $500 for each dependent.	Return and payment due 15 April.	Oklahoma Tax Cammission, State of Oklahoma, Income Tax Division, Oklahoma City 5, Okla.	$1500 of active-service pay is excluded. Filing and paying by member outside the United States or hospitalized in the U.S. deferred until 15th day of 3rd manth following return or discharge from haspital.
OREGON: Net income of $600 if single, $1200 if married. Gross income of $4000.	$600 if single or separated; $1200 if married; $600 additional if blind plus tax credits of $18 if blind, $12 if 65; $600 each dependent. ($1 tax credit, maximum $6, each $100 partial support of less than 50%.)	Return due 15 April. Payment with return or in installments if tax exceeds $25.	Oregon State Tax Commission, Income Division, 100 State Office Bldg., Salem, Ore.; or State Tax Commission, 1400 S. W. 5th Avenue, Portland 1, Ore.	$3000 of active-service pay is excluded. Returns and payment of tax deferred for 90 days after return to U. S. from period of duty exceeding 90 days outside continental United States.
PENNSYLVANIA: No individual income tax, but residents of some Pennsylvania cities and municipalities may be liable for local income taxes. Philadelphia and Pittsburgh exempt all Navy and military pay.				
***PUERTO RICO:** Gross income in excess of $800 if single, separated from spause or if head af family, $2000 if married and living with spouse.	$800 if single or separated from spouse, $2000 if married ar head of family, $400 for each dependent.	Return due 15 April. Payment with return or in two equal installments where no declaration of estimated tax was elected.	Commonwealth of Puerto Rico, Department of the Treasury, Bureau of Income Tax, P.O. Box 9833, Santurce, Puerto Rico.	Nane.
***SOUTH CAROLINA:** Gross income of $800 or more.	$800 if single; $1600 if married filing jointly or only one spouse has income or if head of household; $800 additional if blind, 65 or older; $800 each dependent.	Return and payment due 15 April.	South Caralina Tax Commissian, Income Tax Division, Drawer 420, Columbia 1, S. C.	Same computatians as far federal return.
TENNESSEE: Income over $25 from dividends and interest.	None, except income of blind persons is exempt.	Return and payment due 15 April.	State of Tennessee, Department af Revenue, Income Tax Division, War Memorial Bldg., Nashville 3, Tennessee.	None.

Lowest Amount Of Income Which Requires Residents to File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferments for United States Armed Forces Personnel
UTAH: Gross income of $600 if single or separated from spouse, $1200 if married.	$600 if single, $1200 if married, $600 for each dependent, $600 additional for taxpayer and spouse if blind.	Return and payment due 15 April.	State Tax Commission of Utah, State Office Building, Salt Lake City 14, Utah.	If in foreign country 510 days of any 18 consecutive months may file as a nonresident for each taxable year while so absent for three months or more.
*VERMONT: Gross income of $500 ($1000 if 65 or older).	$500 for taxpayer; $500 for spouse; $500 for each dependent; $500 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	Commissioner of Taxes, Vermont Department of Taxes, Montpelier, Vt.	Same as federal. Members serving outside Vermont may defer paying tax on service pay until six months after discharge.
*VIRGINIA: Gross income of $1000.	$1000 for taxpayer; $1000 for spouse; $200 for each dependent plus $800 to unmarried taxpayer who has a dependent father, mother, son, daughter, sister, or brother; $600 additional for taxpayer and spouse if blind, 65 or older.	Return due 1 May. Payment in full, with return to Treasurer of county or city where return is filed.	Commissioner of Revenue of the county or city of which taxpayer is a resident.	None.
*WEST VIRGINIA:** If federal return is required, or if West Virginia adjusted gross income exceeds exemptions.	Same as federal.	Same as federal.	West Virginia State Tax Commissioner, Income Tax Division, Charlestan 5, West Va.	None except as provided below.
*WISCONSIN:** $1400 combined net income of married couple. Gross income of $600.	Tax credit of $10 if single, $20 if married or head of family, $10 each dependent. $15 for taxpayer and spouse if 65 or older.	Return and payment due 15 April.	State of Wiscansin, Department of Taxation, Processing Center, P.O. Box 59, Madison, Wis., 53701.	$1000 of active-service or reserve pay excluded. Extension of time far filing granted to members on duty abroad until 15th day of sixth month following close of taxable year.

**NOTE: Sec. 7 of West Virginia Income Tax Law provides in part: "Resident individual means an individual who is domiciled in this state unless he maintains no permanent place of abode in this state, maintains a permanent place of abode elsewhere, and spends in the aggregate not more than 30 days of the taxable year in this state, . . ."

**NOTE: Declarations of estimated tax need not be filed by persons on active duty outside cantinental United States.

These Training Films Will Help Your Career

The latest list of training films available is published here. Those in color are designated (C). Movies in black and white are designated (B&W).

Films available through most FAETU and NARTU film libraries are marked (A). Those that are also available through District, Marine and PIO libraries are designated (G).

All films listed here have sound; some have not been released for general distribution and should not be shown to civilian audiences. They are designated (not rel).

Goblin on the Doorstep: MC 9938, Documentary on antisubmarine warfare; unclassified. (G), (C), 28 minutes.

First Aid for Aircrew: MB-9690, Emergency treatment of hemorrhages, fractures, piercing wounds of chest and abdomen, shock and unconsciousness. One crew member administers to five seriously injured crew members. Unclassified (not rel), (A), (C), 28 minutes.

Today is Tomorrow: MN-9997, Encourages eligible naval officers to participate in postgraduate educational program; unclassified (G), (not rel), (C), 21 minutes.

On the Spot—Survival in the Bush: MB-9689B; unclassified (not rel), (A), (B&W), 20 minutes.

Survival—Part 2—Stay Alive in the Summer Arctic: MH-9689B, unclassified, (not rel), (A), (B&W), 26 minutes.

Survival—Part 3—Stay Alive in the Summer Bush: MB-9689C, unclassified, (not rel), (A), (B&W), 25 min.

BOOKS

THESE SELECTIONS REFLECT INTERESTS OF OUR TIMES

IT'S INTERESTING to note how the titles selected by the Library Services Branch point up, from month to month, some of the primary interests and concerns (in addition to three basics) of our times. The subjects chosen this month, for example, concern international relations, science in general and space.

Although many of us take such matters more or less in our stride, much credit is due to the most remarkable skills of our present-day authors. They not only handle relatively abstruse subjects with authority, they make them interesting.

Willy Ley with his latest, *Watchers of the Sky,* is a case in point. At the moment we haven't the slightest idea how many science books Mr. Ley has written but, we suspect, they would stretch from here to at least Arcturus. *Rockets, Missiles and Space Travel, Conquest of Space, The Exploration of Mars* and *Exotic Zoology* is only a representative list. *Watchers* just happens to deal with the history of astronomy which, for the non-mathematical, can be a dreary subject indeed. Not so with Mr. Ley at the helm.

His technique is simple and remarkably effective, although not new. He combines the story of man's knowledge about the skies and their contents with the only too human stories of those who made the discoveries. All the basic facts are here, plus a considerable amount of highly personalized biographical material as well as a fairly complete discussion of well-known and not so well-known astronomical arguments. Some of the technicalities become somewhat involved but they can be skipped if you want to. If you want to know the answers, however, they are to be found here.

The Universe of Science, by Charles-Noel Martin, is along much the same lines. Martin, however, is not content merely to survey outer space. The entire universe is his beat. His discussion ranges from the infinitely small to the infinitely large, in which he discusses the latest findings of physicists, astronomers, biologists, chemists and geologists. In physics, for example, he discusses atoms and their nuclei; the ultimate particles at the frontier of the subnuclear universe; the strange reactions which operate in these areas; anti-particles; space-time dissymmetry. The other disciplines receive similar coverage. These unfamiliar terms suggest tough going for the reader not familiar with the jargon, but this is not necessarily true.

Strangely enough, the science writers appear to be the most gifted in the art of making a difficult subject look easy. All too often the political and economic writers fail in this respect. You may find Tad Szulc' **The Winds of Revolution** to be a happy exception. It is his thesis that the winds of revolution—economic, social, political—have repeatedly swept over the Western Hemisphere; old tyrants have been toppled and frequently replaced by new. However, these processes have not always resulted in progressive, democratic governments. He suggests some ideas leading toward a solution. Szulc, as you may recall, has covered Latin America for some time for *The New York Times,* so he should know what he's talking about.

Peking and Moscow, by Klaus Mehnert, is another account on a subject currently much discussed. The publishers say it is the "definitive" work on the background and present causes of the Sino-Soviet conflict, but as "definitive" is an extremely broad term, we can't commit ourselves. Nevertheless, the author does probe the cultural, historical and ideological differences between the two powers and their significance for the West today. He suggests that China is Asia and Russia is basically European and (maybe) never the twain shall meet, regardless of the common interest of Marxism. Only time will tell.

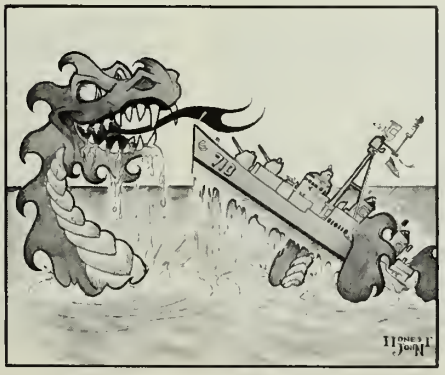
This affair in Vietnam just isn't a sporting sort of war. You'll get the full flavor of the danger, boredom, discomfort and unpleasantness in Richard Tregaskis' **Vietnam Diary.** It should be of specific interest to many Navymen and Marines because, as the story of the first concerted U. S. effort to solve the guerilla problem, it is a story of today's risks and of patterns that are setting a pattern for the future. Tregaskis gives a taste of most aspects—the junk fleet patrolling the seacoast; trips with the Marine helicopters and the Army's H21s; ground forces in the Delta area; and the U. S. fighter pilots accompanying the Vietnamese on their missions. As you know, Tregaskis has just about tied up the diary business in recent years with his *Guadalcanal Diary, Invasion Diary,* and *X-51 Diary.* He's more concerned with what actually happens than solving the future problems of the world.

It is refreshing to note one title concerned with the early, relatively uncomplicated, nostalgic seafaring days **Quarterdeck and Fo'c's'le,** edited by James Merrill, consists of a series of letters, essays, eye-witness accounts, ballads, journals, logs and war diaries of the men who made our Navy what it is today. The subjects range from John Paul Jones' description of an encounter with the British *Drake* in 1778 to the world-circling cruise of *Triton.*

The fiction titles this month are pretty much in the escape category. Both **The Grove of the Eagles,** by Winston Graham, and **The Lost Raider,** by Douglas Reeman, are sea yarns. *Eagles* is laid in Elizabethan times but has a novel twist. It's not about the Spanish Armada. This is concerned with the *second* Armada. You didn't know there was one, did you? Read the book to learn more about it.

Raider is a straight adventure story, centering about the final gesture of defiance on Germany's part during World War I, much along the lines of the famous Count von Luckner. The climax involves much blood, thunder and gore. Well written. The good guys win.

All-Navy Cartoon Contest
John R. Thornton, SOG2, USN



"Boy, wait till ONI hears about this!"



SPECIAL SUPPLEMENT

Astronauts

Project Mercury will undoubtedly stand as one of the great events in the history of the United States in the 20th century.

Project Mercury was accomplished in four and two-thirds years of dynamic activity which saw more than two million people from many major government agencies and much of the aerospace industry combine their skills, initiative and experience into a national effort.

It was also one of the most intensive training programs in our history—which accounts in great part for its success.

It was largely through the Mercury training program that the first seven astronauts (three from the Navy, one from the Marine Corps and three from the Air Force) were able to achieve their success. A part of that training is described below.

The astronaut program of NASA (National Aeronautics & Space Administration) may seem to be somewhat unrelated to the assignment of the average Navyman. However, you may have served in the same ship or squadron with some of the men who recently joined the space program.

In the past year, two new groups have been enrolled. In addition to the Navy-Marine and the Air Force team, candidates from civilian life have been accepted. You'll find their names in the box below and on the following

DO YOU RECOGNIZE THESE MEN? They are the latest representatives from the Navy and Marine Corps in the NASA space program.

★ LT ALAN L. BEAN, USN, 32 years old, was born in Wheeler, Texas.

Bean's last Navy assignment was with Attack Squadran 44 at Cecil Field, Fla., as an A-4 attack replacement pilot. He was graduated from the Navy Test Pilot School at Patuxent and served as project officer on various aircraft far Navy preliminary evaluation, initial trials, and final board of inspection and survey trials at Patuxent from 1960 to 1963. He alsa attended the Schaal af Aviation Safety at University of Southern California.

He has mare than 2000 hours' flying time, including about 1800 in jet aircraft.

He is five feet 9½-inches tall and weighs 150 pounds. He is married and has twa children.

★ LT EUGENE A. CERNAN, USN, 30 years old, was born in Chicago, Ill.

He entered the Navy in 1956. Since 1961 he has been a student at the U.S. Naval Postgraduate Schaal at Monterey and is currently a candidate for a master of science degree in aeronautical engineering. Before his last assignment he was a member of Attack Squadrons 126 and 113 at Miramar, Calif., Naval Air Station.

He has logged more than 1400 hours' flying time, including more than 1200 hours in jet aircraft.

He is six feet tall, weighs 175 paunds, is married and has one daughter.

★ LT ROGER B. CHAFFEE, USN, 29 years old, was born in Grand Rapids, Mich.

He entered the Navy in 1957. His last Navy assignment started in January 1963 as a student at the Air Force Institute of Technology at Wright-Pattersan AFB, Ohio, where he is working taward a master of science degree in reliability engineering. Priar to entering AFIT, he was safety officer and quality control officer for Heavy Photographic Squadron 62 at the Jacksonville, Fla., Naval Air Station.

Chaffee has lagged nearly 1700 hours' flying time, including more than 1400 hours in jet aircraft.



LT Alan L. Bean, USN



LT Eugene A. Cernan, USN



LT Roger B. Chaffee, USN



LT Charles Conrad, Jr., USN

Prepare for Space Flight

pages. Seven of those new men in training today are Navymen; two others are former Navymen; one is a Marine and another is a Marine Reservist on inactive duty.

What does it take to be an astronaut? Perhaps the best answer comes from the NASA publication entitled "Mercury Project Summary, including results of the Fourth Manned Orbital Flight." Permission has been received to publish extracts from this report.

ASTRONAUT job requirements called for individuals with high skill levels, appropriate personality traits and a high level of physical fitness.

In the area of aptitude and ability factors, the individual needed:

- A good engineering knowledge.
- A good knowledge of operational procedures typical of aircraft or missile systems.
- General scientific knowledge and research skills.
- High intelligence.
- Psychomotor skills similar to those required to operate aircraft.

In the area of personality factors, the candidate had to demonstrate:

- Good stress tolerance.
- A good ability to make decisions.
- Ability to work with others under great pressure.
- Emotional maturity.
- A strong motivation for the program.

The physical requirements included:

- Freedom from disease or disabilities.
- A resistance to the physical stress of space flight accelerations, reduced pressure, weightlessness, high temperatures and so forth.
- Medium size so the man could comfortably fit into the relatively small Mercury spacecraft.

The following account from "Results of First U. S. Manned Orbital Space Flight" discusses the preparations that went into a flight into space.

This discussion is limited to the specialized training activities which were conducted subsequent to the selection of the crew for the MA-6 flight. It was written by LCDR M. Scott Carpenter, USN.

EACH SPACECRAFT differs somewhat from its predecessors and a considerable amount of time must be devoted to the study of these differences. The spacecraft familiarization study was accomplished in part by system briefings, conducted by civilian contractors and NASA engineers.

Many hours were spent in formal briefings of this

He is five feet 9½-inches tall, weighs 157 pounds and is married and has two children.

★ LT CHARLES CONRAD, JR., USN, 33 years old, was born at Philadelphia, Pa.

He entered the Navy in 1953 and became a naval aviator. His last assignment was as Safety Officer for Fighter Squadron 96, and before that time he was an F4H flight instructor for Fighter Squadron 121, Naval Air Station, Miramar, Calif.

Conrad attended the Navy Test Pilot School at Patuxent River, Md., and from 1959 until 1961 he was a flight instructor and performance engineer at the U. S. Naval Test Pilot School there. He has logged more than 2800 hours' flying time, including 1500 hours in jet aircraft.

He is 5 feet 6½ inches tall and weighs 138 pounds. He is married and has four children.

★ LCDR RICHARD F. GORDON, JR., USN, 34 years old, was born in Seattle, Wash.

He entered the Navy in 1951. At the time of his selection as an astronaut he was a student at the U. S. Naval Postgraduate School at Monterey. He is a graduate of the All-Weather Flight School and the Navy's Test Pilot School. Before entering the Monterey school, he was assigned to Fighter Squadron 96 at the Miramar, Calif., Naval Air Station, where he had served as flight safety officer, assistant operations officer and ground training officer.

He has logged nearly 2800 hours' flying time, with almost 2000 hours in jet aircraft. He won the Bendix Trophy Race from Los Angeles to New York in 1961.

He is five feet 7-inches tall, weighs 150 pounds and is married and has six children.

★ LCDR JAMES A. LOVELL, JR., USN, 35 years old, was born in Cleveland, Ohio.

His last Navy assignment was as flight instructor and safety officer in Fighter Squadron 101 at the Naval Air Station at Oceana, Va. From January 1958 until July 1961, he was a test pilot at the Naval Air Test Center at Patuxent River, Md. His work there included service as program manager for the F4H Weapon System Evaluation. He was graduated from the Aviation

(Continued on page 60)



CDR Richard F. Gordon, Jr., USN



LCDR James A. Lovell, Jr., USN



CAPT Clifton C. Williams, Jr., USMC



LCDR John W. Young, USN

type. Detailed discussion of evironmental control, reaction control, automatic stabilization and control, sequential, electrical, pyrotechnic, communications and recovery systems were held in the crew quarters by systems engineers. They were attended by the flight crew and representatives of the NASA Manned Spacecraft Center Training Division.

In addition, many hours of individual study were devoted to the notes and publications which applied specifically to Spacecraft.

A second important activity which contributes to pilot familiarity with the spacecraft is participation, as spacecraft observer, in the many systems checks which constitute the preparation of the spacecraft for flight.

This testing takes place both in the hangar and on the launch pad after mating of the launch-vehicle and spacecraft. A total of over 100 hours was spent in the spacecraft by the flight crew during these tests.

DURING THE EARLY PHASES of the training an effort was made to acquire familiarity with the physiological sensations that might be expected during the flight.

At the Naval School of Aviation Medicine, Pensacola, Fla., the flight crew received a refresher course in night vision, and spent periods in the slowly revolving room and in the "human disorientation device."

Studies of the pilot's individual balance mechanisms were made at this time. Since an important objective of the flight was to evaluate the astronaut's tolerance of prolonged periods of weightlessness, studies also were made to provide data for comparison with information accumulated during and after the flight.

THE FLIGHT CREW spent a total of approximately 90 hours in the "procedures trainer" during which complete mission simulations were practiced. These simulations provided experience in the performance of all flight plan activities and familiarity with range procedures.

Much time was spent practicing manual control of spacecraft attitudes. Emphasis was placed on control of the retrofire maneuver, turnaround following sustainer engine cutoff (SECO), and reaction control system (RCS) checks following insertion. Orbit maneuvering

Meet America's New Astronauts (Cont.)

Safety School of the University of Southern California in 1961.

He has logged more than 2400 hours' flying time, including 1700 hours in jet aircraft.

He is five feet 11 inches tall and weighs 165 pounds. Lovell is married and has three children.

★ CAPT CLIFTON C. WILLIAMS, JR., USMC, 32 years old, was born in Mobile, Ala.

He entered the Marines in August 1954. He is a graduate of the Navy Test Pilot School at Patuxent and is currently a student at the Marine Corps Intermediate Staff and Command School at Quantico.

Before his assignment to the Marine School, he served at Patuxent as the F-8 project officer, A-4 project officer, and short airfield tactical support officer.

Williams has logged more than 1800 hours' flying time, including more than 1300 hours in jet aircraft.

He is six feet tall, weighs 187 pounds and is unmarried.

★ LCDR JOHN W. YOUNG, USN, 34 years old, was born in San Francisco, Calif.

Young joined the Navy in June 1952. His last assignment was as maintenance officer for Fighter Squadron 143 at the Naval Air Station, Miramar, Calif. In 1963 he set world time-to-climb records for the 3000-meter and 25,000-meter events in Project High Jump. He has logged 2500 hours' flying time, including 1900 hours in jet aircraft.

From 1959 until 1962 he was project pilot and later, program manager for the Navy's F4H weapons systems project, writing technical reports on flight test results of Navy preliminary evaluation and Board of Inspection and Survey Airplane Trials.

Young is 5 feet 9 inches tall, weighs 172 pounds, and is married and has two children.

In addition, two other test pilot trainees are former naval aviators, and one is a former Marine aviator. Elliot M. See, Jr., was a naval aviator from 1953 to 1956; Neil A. Armstrong was a naval aviator from 1949 until 1952, and during the last two years of that service flew 78 combat missions in the Korean action. R. Walter Cunningham joined a Marine squadron in 1953 and remains a Marine Air Reservist with the rank of Captain, flying with VMA-134 at the Los Alamitos, Calif., NAS.

Other test pilot trainees are:

MAJ Edwin E. Aldrin, Jr., USAF; CAPT William A. Anders, USAF; CAPT Charles A. Bassett II, USAF; MAJ Frank Borman, USAF; CAPT Michael Collins, USAF; CAPT Donn F. Eisele, USAF; CAPT Theadore C. Freeman, USAF; CAPT James A. McDivitt, USAF; CAPT Russell L. Schweickart, Air National Guard (Mass.); CAPT David R. Scott, USAF; CAPT Thomas P. Stafford, USAF; and CAPT Edward H. White, II, USAF.



Aldrin | Anders | Armstrong | Bassett | Borman | Collins | Cunningham | Eisele



Freeman | McDivitt | Schweickart | Scott | See | Stafford | White

with the space craft's low thrusters was also simulated.

Additional practice in the manual control task was acquired through the use of the air-lubricated free-attitude (ALFA) trainer at Langley Air Force Base, Va.

System failures in orbit which would require immediate or end-of-orbit reentries were practiced and discussed.

The majority of trainer time was devoted to launch aborts with the support of Mercury Control Center (MCC) and Bermuda (BDA). The astronaut scheduled for space flight was subjected to simulated system malfunctions of every description. Some of these, with proper corrective action, resulted in continuation of the mission. Others required either immediate or fixed time aborts. These aborts, depending on their nature, could be initiated by either the astronaut or MCC, or both.

Tape recordings of the astronaut's voice were made during these trainer sessions and sent to all range stations so that flight controllers might become familiar with his voice and normal manner of speaking. In addition, physiological and performance data were recorded for postflight comparison with onboard data.

One additional function of the procedures trainer worthy of note is the opportunity it provides to evaluate the pressure suit in the spacecraft environment. The suit restricts mobility considerably, and procedures as well as the special equipment were designed with this limited mobility in mind.

These simulations were excellent not only from the training standpoint, but because they stimulated original thinking that was rangewide, and many flight plan and mission-rule inputs resulted. Much was learned both by the astronaut and the flight control teams. If one activity were to be singled out as being the most valuable in preparing for the flight, it would be this procedures training.

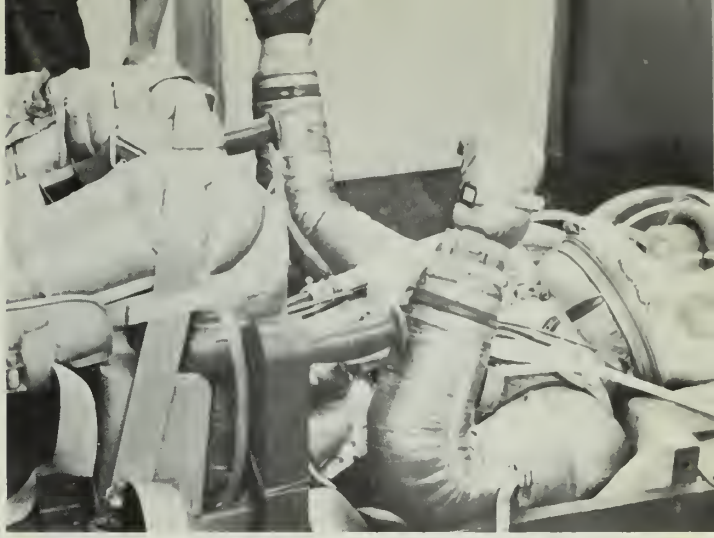
SINCE ITS INCEPTION, the Mercury physical training program has been the option of the individual. One pilot elected to exercise by running. During a three-year period, he steadily built up from one mile to five miles a day. For the three months preceding the flight, he ran five miles nearly every day, except for the final week when he tapered off to two miles, and one mile and then two days of complete rest prior to the flight.

This activity, including dressing and showering, required about one hour per day. It is felt that this is a reasonable amount of time to be so devoted, and anything much short of this is insufficient to maintain good physical condition.

A two-day period was spent at the Morehead Planetarium in Chapel Hill, N. C. This proved to be an invaluable aid in familiarization with the heavens in general, and particularly with those constellations and star patterns that might reasonably be visible through the window for the MA-6 launch date.

Additional study of the constellations was aided by the use of a Farquahr celestial sphere and many star charts, astronomy books and star finders. A star chart, which proved to be not only a valuable study aid but also a good navigation aid and darkside yaw reference device for inflight use, was developed.

Two briefings with the ad hoc committee for "Astronomical Tasks" and with scientists of the Project Weather Support Group and the U. S. Weather Bureau Meteorological Satellite Laboratory were held in Washington, D. C. During this time observations of interest to both agencies were discussed. Development of special equipment resulted from these discussions also.

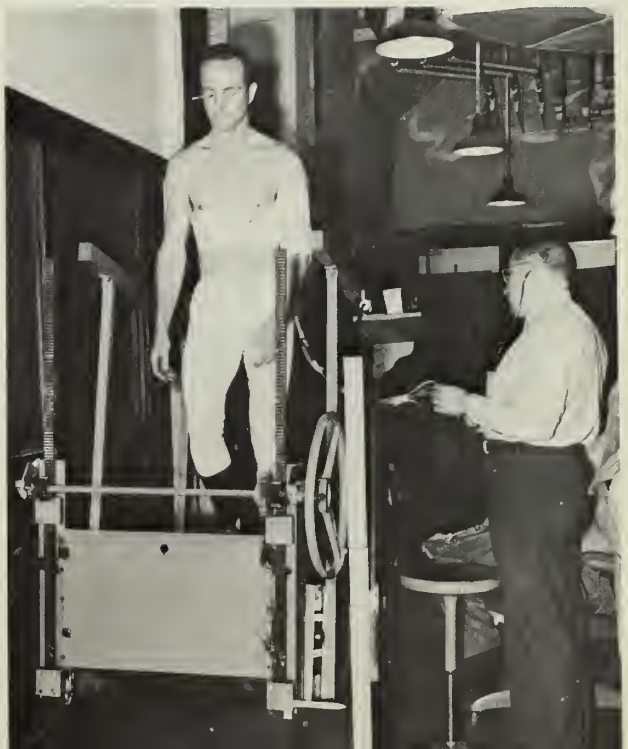


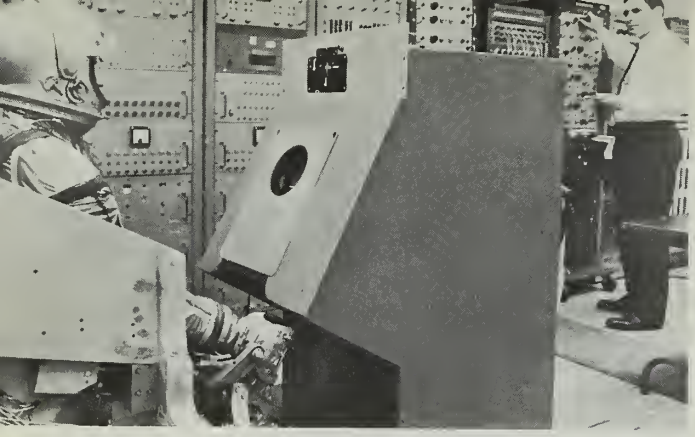
SUITS HIM—Many mockups helped prepare astronauts for blast-off, orbital flight, re-entry and recovery.

AS A RESULT of the preflight briefings, the need for some special equipment was apparent, and a container for this equipment was needed. Here are brief descriptions of this equipment:

- Two large toothpaste tubes were filled separately with applesauce and beef stew. A screw-on straw which punctured the seal on the top of the tube was provided to duct the food over the lip of the helmet to the mouth.
- The pill tube held 10 pills and was spring-loaded for easy extraction of the pills. Each pill measured about three-eighths of an inch thick and three-fourths of an inch in diameter. Nine of the pills were chocolate malt

TESTING—Project Mercury astronaut Malcolm S. Carpenter walks treadmill while wired for a physical check.





'FLYING HIGH'—During training, analog flight simulator creates space flight problems for astronaut to solve.

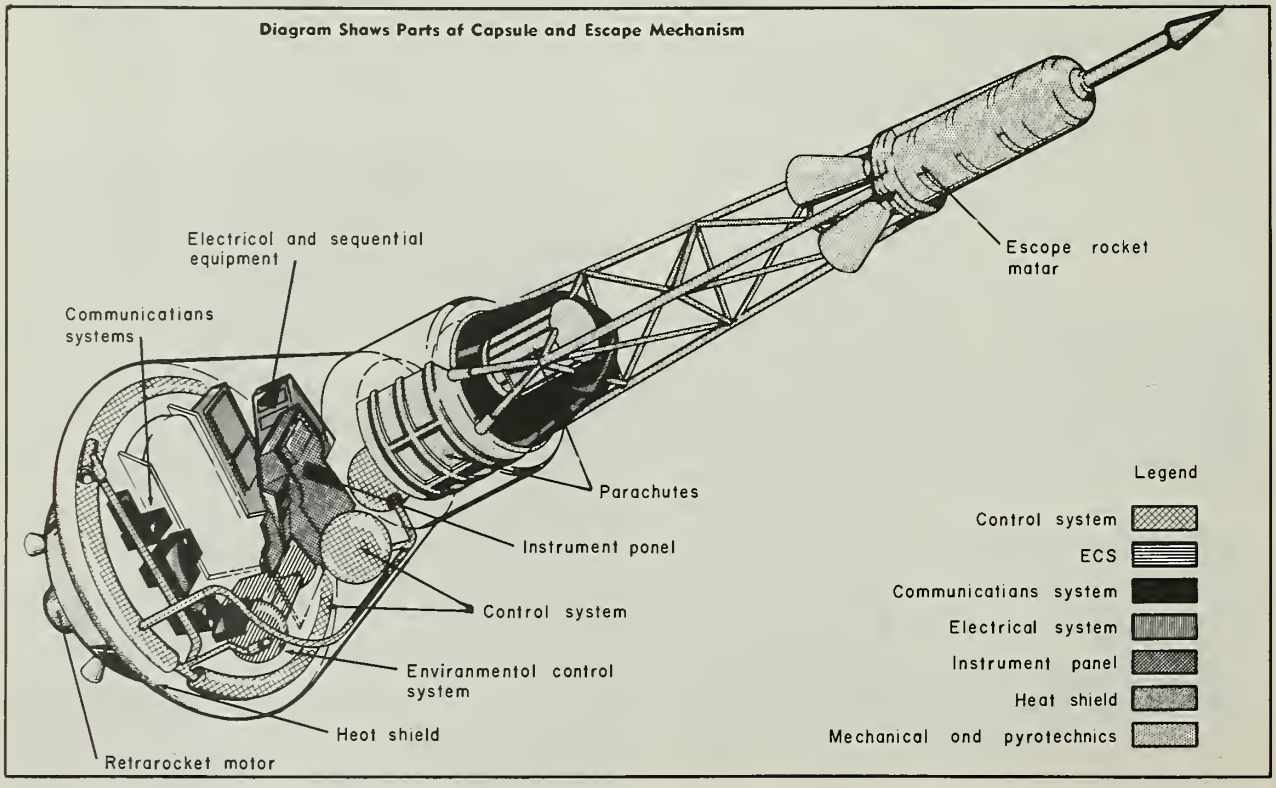
tablets and the other was made of xylose, which is a traceable form of sugar and was included to measure the rate at which the intestine absorbs food during weightlessness.

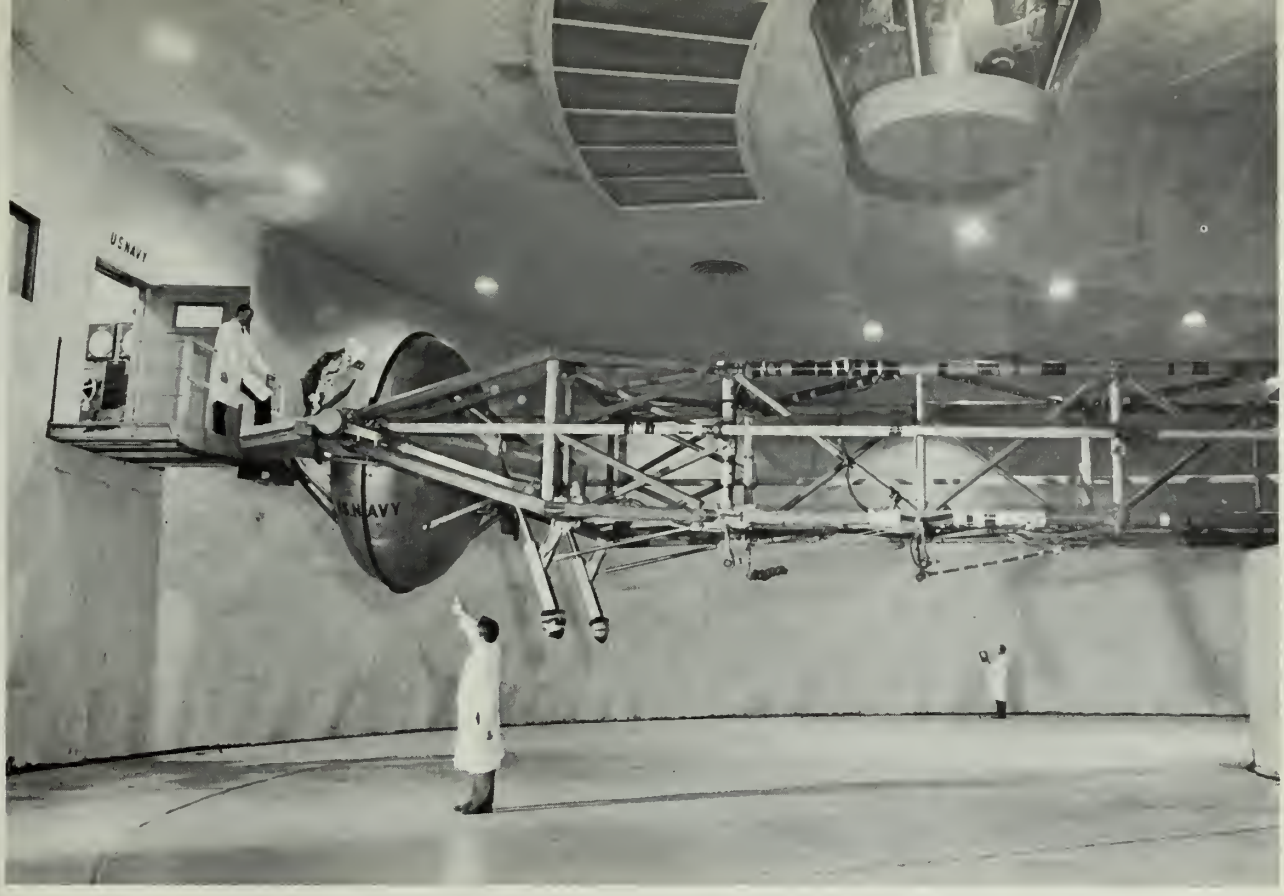
- Pliers were included to facilitate egress through the top of the spacecraft if the pip pins on the parachute canister became jammed, or in the event of a survival situation where pliers have no substitute.
- The "bulb block" contained extra amber, green and red bulbs to be used in the event of telelight or warning light bulb failure.
- A waterproof bag was provided for film stowage after landing and before recovery.
- A camera filter was provided for use with the infrared film and was to be mounted inside the camera when the infrared film was used.
- Extra film was carried for the regular camera; only the one roll of ultraviolet film already in the ultraviolet camera was carried.
- An ultraviolet spectrograph consisting of a 35-mm camera equipped with a special quartz lens and prism system was developed for use through the spacecraft window in the 2000 to 3000 angstrom wave length band. A demountable reticle was provided for sighting on the star.
- A 35-mm camera with a 50-mm F2.8 lens and a photocell which automatically adjusted the F stop was used for daylight photography. Considerable development effort was required to modify the camera for use in the spacecraft by the astronaut in a pressure suit.
- An airglow filter was included. It is a device which filters out all light except the 5577 angstrom wave length, one of the bright lines of the airglow spectrum. It was intended to be used as an aid in studying the patterning of the airglow layer.
- The binoculars were of a miniature type, eight-power with 50-mm objectives.
- The filter block was provided for use with the V-Meter. It allowed all the normal exterior observations to be made while excluding all but red, green or blue light. The V-Meter is designed to be used for 16 astronomical and physiological tests. It is also known as the extinctospectropolariscope-occulogyrogravoadaptometer.

All this equipment was carried in an accessory kit located by the astronaut's right arm. Accessibility was not good but it was the only space available. Use of the equipment was further hampered by the need for a restraining line to each item which was secured to the accessory kit.

In addition to this equipment in the accessory kit, a knee pad, knife, scissors, survival kit, flashlight, star charts, and an orbital chart book with an overlay of world-wide weather were carried.

A discussion of this equipment is pertinent to the astronaut preparation phase because not only was a





ROUND HOUSE—Centrifuge training at Naval Air Development Center simulated stresses that would be felt in flight.

great amount of time spent in the development and modification of the equipment, but a like period was involved in becoming proficient in its use.

MUCH TIME had been spent in egress training prior to the crew selection and little remained to do but polish the procedures.

Egress from the small end and side hatch of the spacecraft was practiced with both HUS and HR2S helicopters at Langley Air Force Base, Va.

Egress was practiced by other members of the astronaut team with a destroyer out of Norfolk, Va., and they reported no problems.

At Cape Kennedy (then Cape Canaveral), two three-hour periods were spent with the LARC amphibious vehicle in deep water familiarization with the liferaft and survival equipment. Many equipment and packing modifications resulted from this work.

Pad egress practice was accomplished at Cape Kennedy utilizing the Midas Tower and the M113 armored vehicle. This practice acquainted all launch complex personnel with the problems related to egress from the spacecraft with launch vehicle in an unsafe condition.

A form of egress training was conducted at the end of each trainer session by going through the actual sequence of events from parachute deployment to actual egress. This practice helped to smooth the existing procedures as well as to develop new ones.

Because of the many delays which preceded the launch of MA-6, it was felt in some quarters that the astronaut might be overtrained. On the contrary, there was easily enough work to fill the available pre-flight period. During the many delays, he continued to train, modify and practice procedures, and work with and modify the accessory equipment.

MANY OTHER studies were conducted which do not fall into any of the previously mentioned categories. A considerable amount of time was spent on:

- Star recognition.
- Morse code practice.
- Study of aerial photographs.
- Study of world charts.
- Study of *Tiros* photographs.
- Study of photographs from previous Mercury flights.
- Study of mission rules.
- Study of *Atlas* systems.
- Attending briefings.
- Physical examinations.
- Correction of minor pressure suit difficulties.

Training data indicated continued improvement up to the day of launch.

The backup astronaut's role throughout was to participate in as much of the training activity as was consistent with the astronaut's need for direct support and the need for an astronaut as spacecraft observer during system tests. Knowing what is involved in this job, it is difficult to envision mission accomplishment in a comparable amount of time without the services of a backup pilot.

The training period in general went very smoothly. Cooperation was the keynote. A few blind alleys were stumbled into but a sizable extension was made to the trail. It is hoped that through the first astronauts' efforts, the way for those who will follow will be easier.

TAFFRAIL TALK

DESPITE THE MOANS of old salts who claim it ain't so, whaleboat racing is still alive in the Fleet. The sport, in fact, was recently brought up to date by the three ships of Destroyer Division 82, who raced their boats in a smooth sea off the coast of Florida. There was only one deviation from the traditional style: the whaleboats had motors.

The three ships, USS *Luce* (DLG 7), *Fiske* (DDR 842) and *Myles C. Fox* (DDR 829) lay to in a triangular position about three miles in perimeter. Alongside *Luce* a motor whaleboat from each ship waited for the starting signal. *Luce* fired her saluting battery and the race was on.

Nearing the first mile turn the boats were gunwale to gunwale in a tight pack. Then the *Fox* entry had to drop out.

The remaining two boats neared the second turn neck and neck. Rounding the turn they headed back toward *Luce* in the final lap. The *Luce* boat was ahead, but *Fiske* was only a half-length behind and gaining. With the finish line only yards away *Luce* had lost all but three feet of her lead.

The saluting battery fired again as the boats crossed the finish line, *Luce* still holding her narrow lead.

We passed this report over to the cognizant section in the Office of the Chief of Naval Operations for comment. No objection to publication, they said, adding, "There are no known regulations which would prohibit a race of this nature, providing the engine governors are not disconnected or otherwise bypassed." COMCRUDESLANT staff, however, is not encouraging motor whaleboat races.

★ ★ ★

IF YOU HAVE been in communication with any of the offices in the Bureau of Naval Personnel recently, you will note that something has been added to the official BuPers letterhead stationery. It includes the slogan "People to the Fore in 1964."

This slogan serves to point up the fact that the Chief of Naval Personnel aims to focus attention on the theme that 1964 is the "year of the people." In the development and procurement of the "hardware" required in modern warfare, the needs of the individual who operates the hardware have sometimes fallen into second place. But more than ever before, the role of Navymen is recognized as a dominant factor in the continuing forward movement and dynamic development of the sea service.

Therefore, to balance the picture, BuPers recognizes that Navymen—and their families—should be given even greater consideration in planning and programing.

In adopting this slogan the Chief of Naval Personnel anticipates that the message will spread throughout the entire Navy, and beyond. Already the theme is stimulating conversation and thought—and action. If each echelon gives more consideration to the effects on people of every decision and program in all areas—operational, fiscal, weapons—results will be felt in "greater efficiency, higher morale and a stronger sea service."

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington 25, D. C.

• **AT RIGHT:** ON GUARD—Boatswain's mate third class Dexter Little, USN, attaches decorative rat guard to bow lines of USS Fulton (AS 11) in port at New London, Conn. The hungry cat was designed and painted by Miguel Garcia, Sr., EMFA, USN.

• **BACK COVER:** Inspiration for the back cover of this month's ALL HANDS came from a Reserve Intelligence unit.





ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

APRIL 1964 | Nav-Pers-O | NUMBER 567

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• **FRONT COVER:** FIRE DOWN BELOW—Many tasks must be accomplished, both above and below decks, to make o ship ready far getting underway. Robert A. Brown, FA, USN, is shown here lighting aff a boiler in USS Midway (CVA 41).

• **AT LEFT:** STATION TO STATION—Destroyers accompanying the attack aircraft carrier USS Independence (CVA 62) begin a maneuver which will lead to newly assigned stotions, during operations in calm seas off the U. S. coast.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only ond does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor. DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U.S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The rate for ALL HANDS is 25 cents per copy (except for the December 1963 Rights and Benefits issue, which is 50 cents per copy); subscription price $2.50 a year, domestic (including FPO and APO address for overseas mail); $3.50 foreign. Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.



USS Burton Island (AGB 1)



USS Edisto (AGB 2)



USS Atka (AGB 3)



USS Glacier (AGB 4) Below: USS Staten Island (AGB 5)





STORM leaves *Edisto* covered with ice.

Breaking

NAVYMEN STATIONED on icebreakers have a nerve-wracking occupation. They are never oblivious to the incessant jolting, pounding and grinding caused when tons of steel crush against tons of ice, and they never cease to imagine that the bottom of their barrel-shaped ship has just been scraped off.

But they learn to work, eat and even sleep while the ship powers its way through 10- to 20-foot-thick ice, sometimes packed solid, sometimes floating, in the most desolate areas of the world.

Nerve-wracking though it may be, icebreaking is an important job. The men and ships doing it play a leading role supporting scientific programs in the polar regions.

Icebreakers open the way for other ships in icebound regions, and they perform a variety of other tasks. Sometimes they carry supplies and fuel to frozen outposts. Sometimes they carry scientists in their search for more complete information on the oceans.

The going is never easy for icebreaker crews. Their ship may spend many months out of port as a matter of routine. And the ride may be just as rough in normal seas as it is while the ship plows through the ice, for an icebreaker has a round bottom and no bilge keels. This design enables it to carry out its icebreaking duties, but the lack of bilge keels to stabilize the ship causes an AGB to roll excessively in normal waters.





BLOW OUT—*Burton Island* blasts through ice. *Rt: Atka* pushes 1.5 million-ton berg from McMurdo Sound channel.

Through the Ice Barrier

As a partial remedy to this situation, Navy icebreakers have a passive anti-roll tank which somewhat reduces the roll action of the ship. The tank is approximately half full of diesel oil and has a series of baffle plates which retard the rush of oil as the ship rolls to port or starboard, thereby creating a moment to counteract and dampen the roll.

When the AGB reaches icebound waters the two helicopters it carries are sent ahead of the ship to scout for leads in the ice pack. To crush through the ice pack, the ship rams the ice and slides up onto it. The weight of the ship breaks the ice. Then the ship backs off and repeats this procedure over and over. The speed of progress depends on the thickness of the ice.

Should a ship get stuck on top of the ice, special ballast systems make it "roll" and eventually slide back off, or failing this, demolition experts must disembark and blast the way clear.

One of the biggest problems encountered by the icebreakers, as well as other ships on polar expeditions, is icing. This adds topside weight and places extra weight on all exterior fittings. Most all topside work, such as launching helicopters, must be preceded by clearing the ice. An AGB carries dry provisions to last the crew for over 300 days of steaming, and frozen meats and food for 200 days. Heavily insulated throughout, the ship provides comfortable living conditions for a crew averaging 230.

The extra provisions are a precautionary measure — in this battle against nature one never knows when nature will take a swipe back. Take the case of USS *Burton Island* (AGB 1), for example. She became stuck in the ice in Weddell Sea, off the coast of Antarctica, in the winter of 1956. She was held fast in the ice for two weeks, from Christmas Eve to early January, before she managed to break loose.

Altogether, the U. S. Navy has five icebreakers. They are USS *Burton Island*, *Staten Island* (AGB 5) in the Pacific Fleet, and USS *Edisto* (AGB 2), *Atka* (AGB 3) and *Glacier* (AGB 4) in the Atlantic Fleet. All but *Glacier* are *Wind* class. *Glacier* is the newest and most powerful, having been commissioned in 1955.

Burton Island has been breaking ice for over 15 years. She has made 19 Arctic voyages and five to the Antarctic. During these years she has proven herself to be very good at her job.

During Operation Deep Freeze '60 she became the first surface ship to penetrate the Bellingshausen Sea, for which action her crew was awarded the Navy Unit Commendation. She has been on winter operations in the Bering Sea between Russia and Alaska. When the ship arrived off Nome, Alaska, in February 1949 the Alaskans could hardly believe their eyes. No ship had ever been there in the winter.

When you think there are few, if any, unconquered frontiers left in this world, an icebreaker crewman will quickly enlighten you on the subject. He sees them often.

BUSINESS END—USS *Staten Island* runs up on the ice while clearing the way.



PRs CHUTE THE WORKS

THEY PACK NAVY LIFE

NAVY'S PARACHUTE RIGGERS are a busy group who work at their job with the constant realization that lots of lives depend on it.

Packing a parachute is not a procedure that's particularly difficult to learn. It does, however, require patience. The folds and ties must be made with the just-so touch of a perfectionist. If a chute is packed properly, it will work. The parachute rigger, or PR, sees to it that it does.

The PR rating was established in 1942. Before World War II, aviation machinist's mates and aviation metalsmiths handled parachute rigging chores along with their other duties.

With the war came more and better aviation survival equipment items, and the need for Navymen specially trained to maintain and repair them.

Schooling for PRs is conducted at Lakehurst, N. J. The "A" school course, which takes 16 weeks, gives PR strikers thorough training in maintenance, inspection, and repair of various survival items carried aboard Navy aircraft.

Parachute rigging, as such, is only part of the PR's job. For example, he may be required to pack a one-man life raft and accompanying sea survival gear into the parachute package for flights over water.

The PR works with everything from complicated oxygen regulators and carbon dioxide and oxygen shop transfer and recharge equipment, to anti-g suits, exposure suits, and protective headgear.



LIFE SAVER—Navy parachute rigger checks chute at NAAS, Whiting Field.

Examples of the PR at work may be found at any naval air station, or on board any aircraft carrier. The dozen or so riggers at Whiting Field, near Pensacola, Fla., account for the repair and packing of approximately 800 parachutes, plus associated survival equipment items. (During one 12-month period, eight of the 800 chutes were used under emergency bailout conditions by student pilots and instructors. Eight were saved.)

At NAS Atsugi, Japan, PRs inspect and rig about 700 chutes per month, in keeping with the Navy requirement that each chute be unpacked, inspected, and repacked every 60 days, whether or not it's been used.

Rigging the chute itself is a methodical process. First, it's inspected. All components are checked for defects. Weak stitching is reinforced. Holes, tears, and chafed areas are mended. Special attention is given the ripcord assembly (a pull of 22 pounds or less should be able to open the pack). Only if it's in top condition will the chute be folded, and packaged for use. After it's packed the PR dates and signs a data card which always accompanies the parachute.

In keeping with the credo "pack every chute as though you are going to use it yourself," each PR "A" school student may volunteer to make a parachute jump, using a chute he packs himself.

(It's interesting to note that the PR student jump only recently became offered on a voluntary basis. For many years "the big jump" was mandatory, along with "A" school, before advancement to PR3 would be authorized. Though "A" school is still an advancement requirement, the jump is not. Nevertheless, the latest word from Lakehurst is that 100 percent of the school's students do, indeed, volunteer to jump with self-packed chutes. Such jumps are true free falls. Hand operated ripcords are used for chute deployment under conditions similar to those a pilot would meet after bailing out.)

No matter how "good' the PR becomes in the course of his training, or on the job later, he never packs a chute alone. Two riggers double checking each other virtually eliminates any margin for error, and the pilot or aircrewman who must abandon aircraft in an emergency can jump without hesitation, parachute to safety, and talk about it later.

TEAM WORK—A chute is never packed by a single rigger, but by two or more so packing can be double-checked.



SAVERS

STEPPING OUT of a plane 25,000 feet above the ground can be an experience you'll talk of for years.

Providing, of course, you first take the trouble to strap to your body a pack containing a large, neatly folded piece of nylon known as a parachute.

Parachute jumping is like driving a car. Once you've learned how to do it properly, and then observe the rules and signals, chances are you won't be involved in an accident.

Many Navymen have made parachute jumps. Most, however, have not. Many wrongly assume that parachuting is a dangerous procedure that only the foolhardy would attempt. Relatively few realize that parachute jumping is a completely safe practice when, as in driving a car, certain rules are observed.

However, the usefulness of parachutes can't be denied.

Parachute jumping is a quick way of getting into a combat zone. It provides the means of reaching injured personnel stranded in otherwise inaccessible areas.

Most important, use of parachutes as safety equipment for flying personnel has meant countless lives saved over the years. The Navy pilot or aircrewman who leaves a disabled aircraft at thousands of feet of altitude relies on the soft, white canopy of a chute to float him safely to earth.

AND, ALTHOUGH THE PARACHUTE is most often used as a safe ground delivery device for people who jump out of aircraft, there are many other useful applications. Occasionally they're used in oddball fashion on the ground, or in the water.

For example, parachutes have been helpful in charting the direction of ocean currents. (The large span of nylon is easily moved by underwater currents.)

Parachutes figure in your weather forecasts when they're used to return delicate instruments to earth after having been sent aloft by balloon.

Chutes have been attached to aircraft to help reduce rollout, and assure safe landings on wet runways.

Mail is delivered to isolated areas by parachutes.

Night bombing missions have been made easier with the help of flares dropped by parachute. Parachutes have even been used to delay bombs.

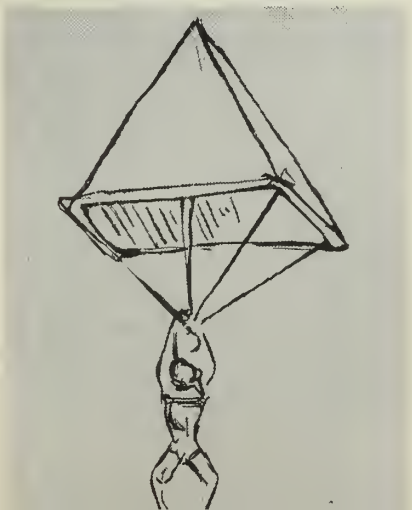
Magnetic mines can be dropped into coastal waters by parachute.

Chutes with 100-foot canopies have been used for cargo drops of 16,000 pounds. (Now under development are chutes that could supply an army with tanks, guns, bulldozers, or virtually any other equipment.) Airplanes have been dropped from other airplanes by parachute.



TOUGH TEAM—Navy SEAL team members jump to objective during exercise.

Copy of Leonardo da Vinci's design for a porochute



Parachutes have eased the nose cones of missiles back to earth.

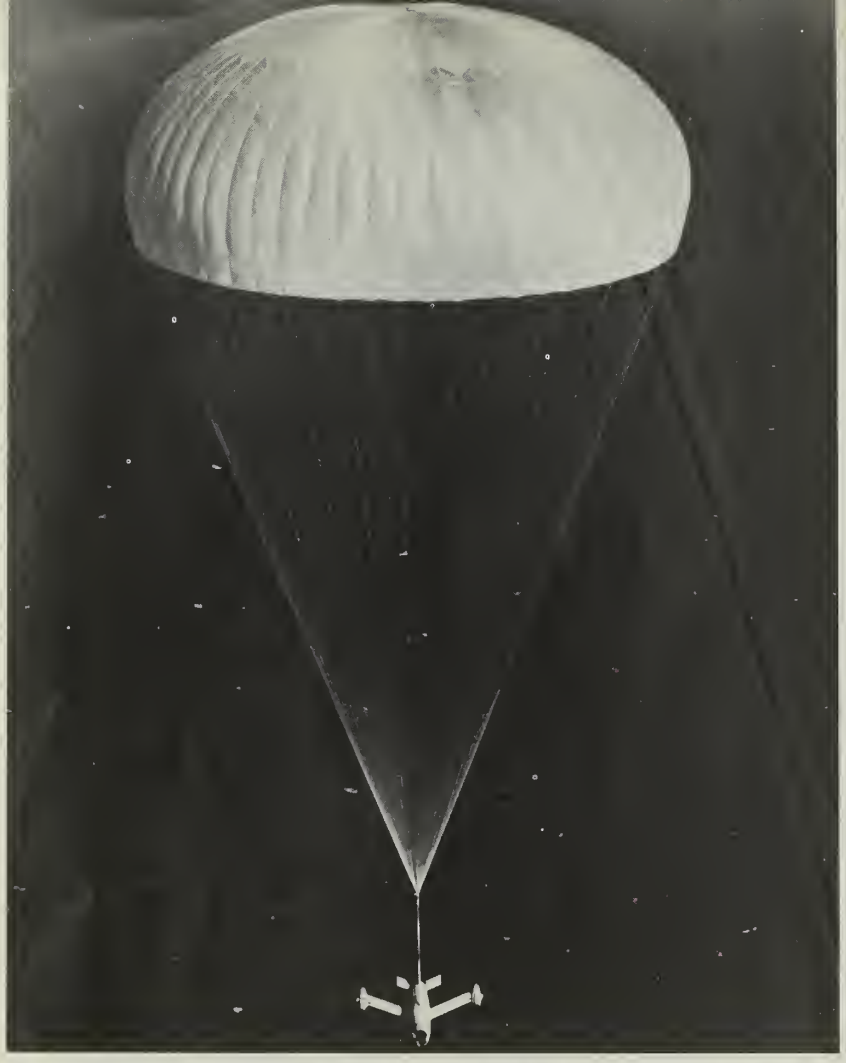
These are but a few of the many uses for parachutes. One can only speculate on what they may be used for in the future.

As for the present, it may be interesting to discuss exactly what the parachute is, where it came from, and who in the Navy uses it. As you'll note below, today there are probably more Navymen who use parachutes than ever before, and it has developed into a popular sport.

THE HISTORY of parachutes and parachuting is sparse, and conflicting. It's likely that many ancient ideas concerning parachutes were never put on paper, and that many early parachute events were never recorded.

There are, however, some known facts concerning the names, dates, and places of parachute development.

In Italy in 1495, Leonardo da Vinci designed what may have been the first parachute—a pyramid of cloth. (Many of the structural fea-



HAPPY LANDING—Parachutes make possible the recovery of valuable equipment, including target drones, scientific testing gear and space capsules.

tures shown in da Vinci's early sketches are used in today's chutes.)

In 1617, Fouste Veranzio jumped from a tower in Venice, Italy, using as a parachute a square, wooden framework covered with canvas.

In France in 1783, the Montgolfier brothers conducted experiments with hot air balloons which included tests of various parachutes. During one experiment with a seven-foot chute they dropped a sheep safely to the ground from a high tower.

Also in France in 1783, Sebastien Lenormand used a 14-foot chute to jump safely from a tower. In 1785 in France, J. P. Blanchard took a dog up in a balloon and dropped the animal to the ground unharmed.

Blanchard has been credited with designing the first parachute which could be folded—one that was made of silk. (Before the Blanchard foldable model, all parachutes were attached to some form of framework which held cloth or canvas open.)

CREDIT FOR BEING the first parachutist goes to Andre Jacques Garnerin of France. During the late 1790s, Garnerin jumped from hot air balloons at heights of 2000-8000 ft.

Before 1800 it was decided that something should be done about the oscillation problems peculiar to early parachute designs. A French scientist suggested that a hole be cut at the apex of the canopy to permit the caught air to escape in a slow, steady stream at the top, rather than unevenly over the edges. This relieved the oscillation, and such a feature has been used in chutes ever since.

In 1808, a Polish balloonist named Kuparento jumped from a burning balloon over Warsaw, and is believed to have been the first person ever to save his life by using a parachute under emergency conditions.

For nearly 100 years after Kuparento's jump the need for foolproof parachutes was not sufficient to stimulate much inventive effort.

Then, in 1903 (during which year the Wright brothers stayed aloft in their primitive airplane at Kitty Hawk), the parachute began leaving the sideshow to become an important part of aviation.

Next came a period of experiments with chutes specially designed for use with aircraft. The old balloon type chute was unsatisfactory. It constantly fouled when used in the faster moving airplane.

In 1910, an Italian inventor named Piano introduced the back-pack parachute which contained a small pilot chute. When activated, the pilot chute blossomed from the pack and pulled the larger canopy out.

THE FIRST SUCCESSFUL jumps from aircraft were performed with makeshift chutes. In America, Grant Morton carried a loosely folded silk parachute in his arms, jumped from a Wright Model B airplane over Venice Beach, Calif., and, after clearing the plane, tossed the bundle of silk to the breeze where is caught and billowed.

In 1912, Albert Berry jumped with a chute packed in a cone-shaped metal cylinder attached to the underside of the plane's fuselage. Berry crawled from the cockpit to the axle and slid onto a trapeze bar which served as a harness. The weight of his body pulled the chute from its container.

During World War I, the lives of some 800 balloonists were saved by parachutes. However, chutes were not considered to be essential aviator equipment items. Less than one one-hundredth of one percent of aerial missions made during the war were flown by pilots wearing parachutes. The resultant mortality rate was high, and the need for an efficient, man-carrying chute that could be used in an emergency became a primary requirement.

After the war came various types of chutes—the Heinecke (German), the Mears and Guardian Angel (British), the Orrs and STA (French), and the AEF (U. S.). All were heavy and unwieldy, and none was safe at speeds greater than 100 mph.

However, it was accepted that parachutes saved lives if they worked.

IN 1919, the U. S. Army directed Major W. L. Hoffman and a civilian, Mr. Floyd Smith, to con-

duct research and experiments with parachutes at McCook Field, Dayton, Ohio, with a view towards making them safe. In April of that year, a free fall parachute was tested.

On 22 Oct 1922, 2nd Lt. Harold R. Harris became the first man to save his life by making an emergency free fall jump—putting into practice what had been learned at Dayton. The value of the free fall chute, activated by a hand operated ripcord, had been proven. Such a chute could be used in an emergency, allowing the pilot or aircrewman to be well clear of the aircraft before opening his chute.

As a result of research and testing at Dayton, work was begun on what was to be the basis for present day parachutes. Finally, in 1924, a reliable portable parachute was developed and military pilots were told to wear chutes on all flights.

As the parachute proved successful, specialist jumpers emerged. In October 1928, General Billy Mitchell arranged for six men to jump from a bomber aircraft at Kelly Field, Tex., land, and set up a machine gun. Thus, the first paratroopers.

In 1933, 62 Russian parachutists jumped from bombers—the first recorded mass jump.

In 1934, the U. S. Forestry Service began experiments which resulted in the dropping of men and supplies by parachute to fight forest fires. Today they're known as smoke jumpers.

DURING WORLD WAR II, the operations of thousands of paratroopers—foot soldiers gone airborne—were exciting, and effective. The expression "hit the silk" reached a peak of popularity. (Silk incidentally, was used in the manufacture of most pre-WW II parachutes. Nylon has been used since the war, but the expression "hit the silk" has endured. For some reason, "hit the nylon" never caught on.)

With the jet age came new parachute problems. The chutes and aircraft escape systems of World War II were unreliable for high speed aircraft.

A parachute experimental unit was formed at El Centro, Calif. (now known as the U. S. Naval Parachute Facility), and over the years has been the development backbone of high speed escape devices that have kept pace with new designs.

The problem of clearing an aircraft traveling at high speeds was solved with the introduction of the ejection seat, which can fire the pilot clear at 600-mph speeds. (An ejection system has since been developed that can eject a man from his aircraft, open his parachute automatically, and float him safely to the ground. All this can take place while the aircraft is still on the runway or carrier deck.)

Problems presented with bailouts at high altitudes also had to be solved. Jumpers who leave a warm cockpit and fall through sub-zero space needed special clothing. Above 18,000 feet there isn't enough oxygen to supply a man's requirements, so appropriate bailout bottles and oxygen masks had to be designed.

A barometric parachute release was developed. When the pilot jumps at a high altitude, he free falls to a "safe opening" altitude and his chute opens automatically.

THIS BRIEF background makes it clear that the idea of parachuting is by no means new. Further, the parachute has changed considerably over the years.

A parachute is not the simple, umbrella-like device many people believe it to be. Nor is it the mysterious, complicated piece of gear that only an expert can understand.

All parachutes used by the Navy consist of canopy, suspension lines, pack and harness.

The canopy, which may vary in size from chute to chute (the most popular is 28 feet in diameter), is the large umbrella-like area of nylon cloth which slows the descent of the jumper. Tough nylon suspension lines connect the canopy to the harness, or arrangement of nylon webbing and metal fittings in which the jumper "sits."

The harness also serves to carry the pack which encloses the canopy and suspension array when the chute is worn.

Chutes not packed for static line deployment (in which line is hooked up inside the aircraft and the chute is deployed automatically seconds after jumping) have a ripcord for activation. The ripcord consists of a grip or handle, length of cable, and two or more short pins. The ripcord is fastened to the harness and pack by means of a pocket, housing, and locking cones.

Many chutes have the pilot chute



BACK THEN — Navy chutist of the Thirties readies for jump from wing.

feature, or small parachute attached to the top of the main canopy. The purpose of the pilot chute is to pull the canopy from the pack quickly.

THE NAVY USES three basic types of parachutes. These may be carried on the chest, seat, or back, depending on the particular needs of the pilot, aircrewman, passenger, or jumper with a mission.

Navymen who use parachutes these days may generally be categorized as follows:

- Official, designated parachutists who jump as part of their military duties.
- Navymen (and women) who participate in sport parachuting, or skydiving, after hours on their own time and at their own expense (see

ON THE SPOT — Chutes drop supplies and equipment in isolated spot.





BIRD MEN — Navy's parachuting team, *Chuting Stars*, float toward earth.

article appearing next month).

• Aviators, enlisted aircrewmen, and military air passengers who have access to chutes as standard safety equipment. (Relatively few in this category are ever required to jump with their parachutes. Nevertheless, all Navy flying personnel have parachutes, and know how to use them.)

Official, designated Navy parachutists are attached to Sea-Air-Land (Seal) teams, underwater demolition teams and a smattering of other activities. Designation as an official parachutist is a definite requirement for Seal team membership. Most UDT personnel (approximately 90 percent of East Coast based frogmen, slightly less on the West Coast) are also qualified chutists.

The Seal and UDT units have billets for hospital corpsmen who go through rigorous special training to qualify as special operations technicians.

Members of the Chuting Stars parachute exhibition team are also official, designated parachutists who perform show type maneuvers that involve skydiving.

Other official parachutists operate as paramedics out of Cubi Point, Philippines, and as para-rescuers with Air Development Squadron Six in the Antarctic.

MORE AND MORE these days, the official Navy parachutist is going to the free fall, and the hand-operated ripcord. (Unlike the Army paratrooper, who has long been associated with the automatic static line method of parachute deployment.)

For example, Seal team members receive training in the HALO (High Altitude, Low Opening) method of jumping, which involves many free fall techniques employed by the Chuting Stars and other sport and exhibition parachutists.

Using the HALO method, the chutist leaves his aircraft at an altitude as high as 25,000 feet, free falls to a safe opening altitude, then pulls the hand ripcord. As might be expected, the HALO jumpers wear appropriate clothing and carry oxygen supplies, altimeters, and stop watches. (The altimeter and stop watch, attached to the reserve chest pack, tell the free faller when it's time to pull the ripcord of his main chute. In the unlikely event the main pack should not work, the preplanned opening altitude is high enough to permit plenty of time to use the reserve chute.)

Many official parachutists, particularly those belonging to Seal teams, use chutes that are modified for "steering." The modified canopies enable the jumper to move in a horizontal direction and steer towards a predesignated target, rather than drift along with the air currents. Certain panels in the rear of the canopy are removed, allowing trapped air to escape in a jet-like flow. This gives the jumper a moderate form of propulsion while he's descending.

The chutist controls his direction of drift by pulling either of two control lines attached to each outside edge of the cutout panel area. Air is spilled and the canopy turns in the direction the jumper chooses to go.

Many of today's parachutes have long, slender sleeves which fit over the folded canopy while it's being packed. The pilot chute pulls out the sleeve, which then gracefully draws out the canopy.

Jumping into water—a tricky procedure—is a matter of routine training for Seal and UDT chutists. (Most other jumpers, official and unofficial, make water landings only when forced to do so, such as when bailing out of a disabled aircraft over a body of water, or drifting over and into a water area accidentally.)

OFFICIAL parachutists are always anxious to broaden their qualifications and experience. Some volunteer for tests of new equipment and landing procedures. Others experiment with going up, instead of down, with what is known as parachuting in reverse, or the Sky Hook System.

Seal and UDT personnel have been experimenting with parachuting in reverse for the past five or six years. Here's how it works: One end of a 500-foot line is tied to a balloon. The other end of the line is attached to a harness device, worn by the man on the ground. The balloon is released. An aircraft specially equipped to snatch hold of the line with a "skyhook" comes in low. The line is grabbed by the aircraft hook, and the man is pulled up and into the aircraft.

It's a tricky procedure, but several Navy parachutists working at Patuxent River, Md., have done it successfully. Such a technique, though still experimental, may have on-the-job applications for Seal and UDT team members of the future. Obviously the Sky Hook would be used for quick pickups after special inland reconnaissance.

Hospital corpsmen who work with the Seal and UDT teams are mainly concerned with the health of the men with whom they work (and jump). Their parachute training goes along with the military and technical duties

for which they have volunteered. Training is official, and at government expense.

THE PARAMEDIC team operating out of Cubi Point, Philippines, received its start under somewhat different circumstances.

The only team, as such, now officially recognized by the Navy, the Cubi Point paramedic unit was organized in 1961 when a chief petty officer became interested in paramedic training conducted by the Air Force.

The need for the team was demonstrated later that year when a plane crashed at Palawan with seven men on board, and neither helicopter nor surface ship could reach the scene with help.

The incident prompted two flight surgeons, two corpsmen, and two qualified parachute riggers to volunteer on their own for parachute jump training.

In October 1962 the Chief of Naval Operations officially recognized the Cubi Point paramedics, and designated the team members as official parachutists.

These men have made hundreds of jumps, and have collected plenty of bruises. They believe it's worth it, for they've saved the lives of men who might otherwise have lain helplessly injured in plane wreckage in the Philippine jungles.

A variation of paramedic is pararescue. Air Development Squadron Six, the Antarctic support unit which participates in Operation Deep Freeze activities, has 10 Navymen trained to jump on rescue missions over the ice.

Qualifications for assignment to such official parachute duties are the same for officers and enlisted men. However, orders to parachute duty, and naval parachutist designations, come from different channels.

Enlisted men who qualify may be designated as naval parachutists by their commanding officers. Officers are designated by the Chief of Naval Personnel.

Training for official parachute duties may be conducted in the Fleet, at certain designated shore research and development activities, and in designated Naval Air Training Command activities.

But, before you can be designated as a Navy parachutist, you must perform parachute jumps as an essential part of military duty, directed by competent orders. Before receiving such orders you must be psychologically and physically qualified, and must not be in a flying pay status.

Assignment to parachute duties requires completion of a formal jump course, which includes at least five training jumps.

ONCE QUALIFIED, you may be entitled to wear parachutist insignia on your uniform—either the Basic Parachutist Insignia or the Naval Parachutist Insignia. The difference between the two is five jumps. The Basic Insignia is worn by those who are designated parachutists (which requires the five basic training jumps). After an additional five jumps under orders to duties involving parachuting, the Naval Parachutist Insignia may be worn. (*Uniform Regulations* describes the insignia and manner of wearing.)

The Navy's show parachute team, the Chuting Stars, has billets for 15 parachutists who meet all the above requirements, become designated chutists, and are selected to perform skydiving exhibitions.

Organized in 1961, the team was to participate in naval aviation anniversary celebrations throughout the U. S. on a roving demonstration basis.

The success of the team was so great, and public demand for performances so enthusiastic, the Navy Department decided in July 1961 to make the Chuting Stars a permanent unit.

THE STARS' road exhibition season normally runs from March through November. This year, the tentative schedule calls for exhibitions at various cities in states ranging from New Hampshire to Southern California, and Washington to Florida.



CHUTE DOC—Paramedic team at Cubi Point was designed to bring aid into hard to reach locations.

In good weather the Stars begin their performances at 12,500-foot altitudes. This permits long free falls and more maneuverability. When the weather prevents high altitude jumps, the Stars have alternate routines they can perform from intermediate or low altitudes.

The Stars use the specially modified "sport" parachutes that can be steered for target landings and, to enable the ground spectator to follow free fall maneuvers, wear red smoke grenades secured to their boots.

Their maneuvers are spectacular. Falling at speeds as great as 185 mph, they pass batons from one jumper to another; and numerous catching - up - to - and - passing - your-buddy-while-falling maneuvers and countless controlled somersaults, are performed with perfection.

The Stars make all this look easy, but any sport parachutist knows that it's really rather difficult. Skydiving is, however, a great deal of fun.

—Dan Kasperick, JOI, USN

WET WORK—Landing in water is tricky, but SEAL teams are trained to do it.





DIVERS check *Hydra-Iris* rocket at Point Mugu's inner sea test range.



REGULUS roars from surfaced sub.

Naval Air

BEFORE THE Naval Air Missile Test Center set up shop, Point Mugu, Calif., was simply a collection of barren acres smattered with Quonset huts and other temporary structures which were the residue of a World War II Seabee training camp.

In 1945, however, things began to change. A Pilotless Aircraft Unit detachment arrived and, taking advantage of what little was available, went to work.

Accommodations at Point Mugu were hardly luxurious. The men lived in shacks and huts. All military personnel messed in the same building. There weren't more than a dozen telephones in the entire center and other supplies were so scarce that one man had a full-time job searching the countryside for surplus items.

Before 1945 bowed out, Point Mugu was introduced to the guided missile era when some dead-load shots were made to test its new XN-1 launcher. The object of early firings was simply to get the birds off the ground, and they were only a little more complicated than firing a skyrocket on the Fourth of July.

Instead of using an exhaustive electronic countdown, checks of the missile were made by a man on the scene who went over the weapon with his wrenches and screwdrivers. After he was certain all was well, he dropped a handkerchief to signal to the man at the firing switch.

The switchman was perched in a tower so he could visually check the danger area and see if the coast was clear before he blasted the rocket off its launcher. Seeing nobody in danger, he would throw the switch sending current along a circuit about as complex as that used in detonating a charge of dynamite.

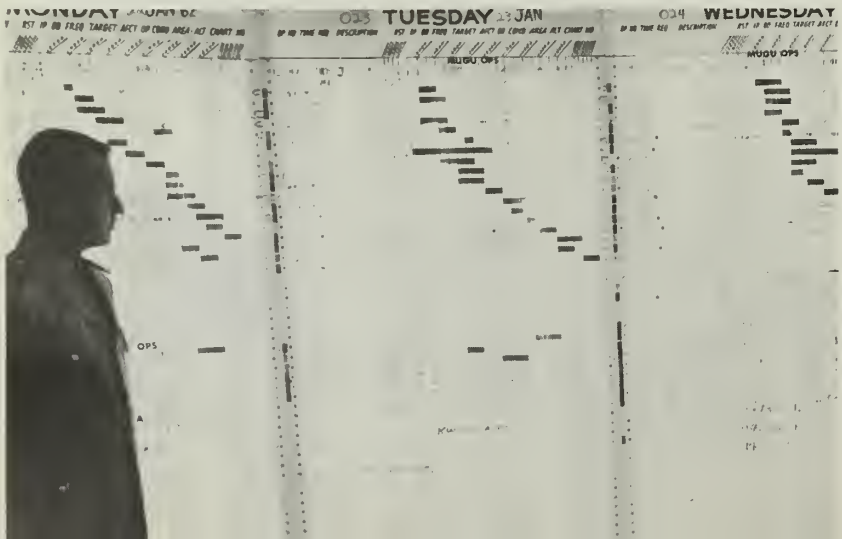
IN 1946, several hundred German V-1 buzz bomgs arrived at Point Mugu to be used in testing the practicality of launching a rocket from a submarine. The first launchings were controlled from Blockhouse Able.

The blockhouse had concrete walls a foot thick with windows of bullet-proof glass which had been scrounged from junk-pile-bound World War II aircraft and installed several layers thick in the blockhouse viewing ports. Later a steel plate was bolted to the side facing the pad to afford additional protection.

The going wasn't easy in those days. The public was tired of everything that reminded them of the war just past or the possibility of another in the future. The public's attitude toward rocket men was similar to that of the blacksmith when the first automobile chugged past his shop.

Little by little, with bootleg funds, the Navy continued its missile testing and built its own improved buzz bombs with radio-controlled guidance systems. A launching platform simulating a rolling submarine deck was devised and *Loon* missiles were suc-

RANGE SCHEDULE board at NMC Point Mugu, shows day-to-day operations.









TARTAR AND TERRIER start runs downrange. *(Rt.)* Headquarters, NMC and NAS Point Mugu, as seen from the air.

Missile Test Center

cessfully fired into target areas. During 1946, 50 missiles (mostly *Loons*) were launched at Point Mugu.

AS TIME PASSED, Point Mugu gained prestige which was reflected in its new title of U.S. Naval Air Missile Test Center. Money followed success and contracts were let for new missiles that would exceed the *Loon's* capabilities.

Since it opened for business, Point Mugu has tested (in addition to *Loon*) the *Lark, Sparrows I, II* and *III*, the ramjet test vehicle *Meteor, Regulus I* and *II, Corvus, Sidewinder* and others.

Nor have the scientists and technicians at Point Mugu confined themselves to testing and evaluating U. S. missiles and targets alone. Australia's *Jindivik* target was tested and evaluated at Point Mugu as were the French target CT-41 and Canada's *Black Brant* rocket.

In contrast to Point Mugu's 50 launchings in 1946, the Point's 1963 schedule called for more than 600 launchings and 3000 support operations.

Supplanting the first shacks and primitive blockhouse, the control center today resembles a backdrop for a science-fiction movie. Its roof is a weird labyrinth of quad-helix, parabolic and omnidirectional antennas which sweep the sky like giant ears for any passing radio signal from missiles which transmit in the neighborhood of a hundred different kinds of information ten times a second.

Today, Point Mugu retains little in common with the location selected 17 years ago, except for its proximity to space-age industry and its system of offshore islands used for missile tracking—both of which were factors in its being chosen over 58 competitors along the east, west and Gulf coasts and the Caribbean.

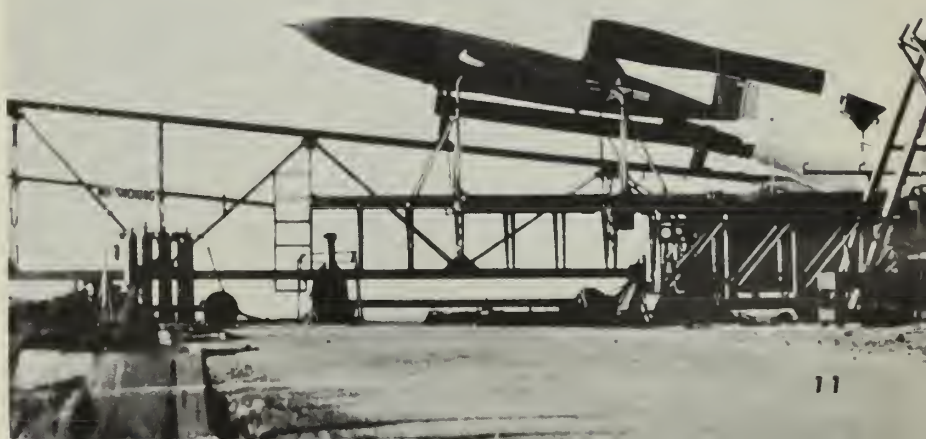
In 17 years, the Point has wrapped itself in the mantle of experience acquired since the first *Loon* wobbled uncertainly from its launcher to the breaker line of the Pacific.

Today, Point Mugu has what it takes to test and evaluate the most sophisticated missile the Navy has to offer.

—Robert Neil.



THE *LOON* rests on launcher. *(Above)* Computers help track missiles.





Country Doctor, USN, in

IN THE PREDAWN gloom a battered jeep whines through the streets of Kaohsiung, Taiwan, and disappears down the narrow highway leading out of town. In the jeep, two men rub the sleep from their eyes and focus on the vacant road ahead.

One of the men is an American—LT Fred E. Sobotka (MC), USN. The other is a native of the island, a driver and guide provided by the Nationalist Chinese Navy. It is Saturday, and the back of the jeep is loaded with cardboard boxes of pills, serums, ointments, salves, balms and bandages.

Their destination: A small, isolated village hidden by a blanket of fog 6000 feet up the side of the mountain. The mission: To provide free medical treatment for hundreds of poverty-stricken aborigines.

The trip is rugged and takes a long time. The roads are poor by any standards; in the mountains they narrow down to hand-hewn rock trails which erode dangerously in the torrential rains. Bridges wash away from one week to the next and detours are lengthy and doubtful.

To Dr. Sobotka such hazards are part of his off-duty volunteer work. "Compared to the diseases a doctor is faced with treating and the few drugs available for his patients," he says, "bad roads don't seem too important." But travel is a problem.

Dr. Sobotka has been head of the U. S. Naval Support Activity Det. 5 dispensary at Tsoying, near Kaohsiung, since mid 1962. But to the Taiwanese he has become something of a medical godfather and worker of miracles. Here's how he earned this reputation with the people back in the wilderness of Taiwan.

ON HIGH — Shrouded in mist, Dr. Sobotka chats with Sister who often helps him as an interpreter.



WHENEVER he can be spared from his regular duty, Dr. Sobotka makes the trek into the southern interior of the island. His medical circuit includes seven villages in the lowlands and the aborigine settlement in the mountains. Usually he coordinates his visits with two missions in the area, but occasionally he goes into the mountains on his own. A routine day would bring him face to face with a staggering variety of ailments.

"In these isolated areas practically everyone suffers from malnutrition," he says. "Many of the children have TB, rheumatic heart diseases, polio, vitamin deficiencies and skin diseases. The adults come in with every-

thing the youngsters have, plus thyroid, liver ailments, protein deficiencies, kidney diseases, cancer and trachoma."

Treatments come from a limited supply of common drugs, some donated and others paid for out of the pockets of the Navy doctor and his friends.

"U. S. Navy ships are constantly coming into Kaohsiung," says Dr. Sobotka. "Many times their dispensaries have serums and drugs in excess. We have been able to give Salk vaccine to 500 children recently because the serum would have gone out of date before the ship could have used it. The ships are glad to help us whenever they can.

"Project Handclasp has been a great help too," he says.

SOBOTKA WAS BORN in Vienna in 1929. Both of his parents were victims of Hitler's concentration camps and Sobotka, smuggled out of the country as a child, was raised by an uncle—a country doctor—in the United States. Taking part-time jobs and earning scholarships, he was educated at the University of Buffalo,

Taiwan

and in Europe. After completing his internship in a Buffalo hospital he specialized in pathology at Providence Hospital in Seattle, Wash.

He completed the work in February 1961 and immediately accepted a commission in the Navy. It was his first assignment in the Navy which gave him the idea for his clinic in Taiwan.

Sobotka was assigned as Squadron doctor for Destroyer Squadron 23, home-ported in Long Beach, Calif. Shortly after he reported aboard, the squadron departed for a cruise in Western Pacific waters. On reaching Taiwan he went on administrative leave "to see if I could help the Taiwanese." During the next two months he treated more than 1000 villagers—most of whom had never before seen a doctor.

"I looked around and saw how little had actually been done compared to the remaining need," Sobotka says, "and I knew I wanted to return. When I learned that the doctor at the Tsoying dispensary was due for relief, I wrote back to Washington requesting the assignment." When the squadron returned to Long Beach his orders were waiting for him.



GOING UP—The doctor's jeep arrives at outpost before entering mountains.

THE TSOYING dispensary meets the medical needs of some 1000 U. S. servicemen and their dependents. It also serves as public health agency for all restaurants and hotels used by the Americans. The dispensary is staffed by two doctors, a nurse and three corpsmen.

"This is a big responsibility," Sobotka says, but he still found off-duty

DOC'S IN—Villagers are apprehensive as they come to doctor for treatment.







ROAD WORK—Dr. Sobotka packs donated medicines and *(rt.)* passes buffalo cart on way up steep mountainside.

time for his roving clinic, which showed signs of growing rapidly. In addition to expanding his own efforts to include more villages, he works closely with Sister Margarita, a Philippine medical missionary whose most prized possession is a set of blueprints hanging on the wall of her St. Dominic Hospital in the village of Chi-shan Chen. The blueprints are for a TB clinic which she and Sobotka recently built in the mountains near the aborigine village.

Sister Margarita usually accompanies Sobotka into the mountains. She speaks the language fluently and is a familiar face to the Taiwanese mountaineers.

"They are superstitious," Sobotka says. "They capture wild deer in the mountains but only for their antlers which they grind into powder for medical purposes. I once brought them boxes of powdered milk in the hope it would help combat their malnutrition problem. When I returned a week later I learned they had fed the milk to their pigs. The pigs are sold to local witch doctors for sacrifice." The aborigines are not Chinese but related to the Malayans.

"Most of these people," he says, "have a fear of water and bathe only when it rains in the summer—and even then usually only the children display any real enthusiasm for it. They catch monkeys, raise pigs and deer but most of them subsist largely on a diet of sweet potatoes. Many of them have cancer."

CHECKING — Young native is checked for TB, which is prevalent in the area.



SINCE THEY are unaccustomed to medicine, even simple aspirin seems to have a powerful effect. The climate in the mountains is always cold—the village he visits is usually shrouded in fog. There are no doors on the crude homes and families share a common cooking fire in the village compound. They grind meal in ancient fashion, in a huge bowl and mortar made from logs.

Usually trips to the mountain village are restricted to the dry season because of torrential rains, but even then there is no guarantee of driving straight through. Twice the Navy doctor was forced to leave his jeep somewhere below the village and walk—almost straight up along narrow washed-out ledges—to the village. Once he hiked 12 miles in a rainstorm to treat a child for pneumonia.

In addition to his missionary work, Dr. Sobotka teaches pathology twice a month at the Nationalist Chinese Medical School in Taipei.

"Taiwan needs more doctors," he says, "but more important, they need teachers. There are many young men and women enrolled in the medical school, but they suffer because of an acute shortage of qualified instructors."

The Navy doctor is scheduled for reassignment soon back in the United States. When he departs he will leave behind lots of good will and appreciation toward the Navy, its Medical Corps and the citizens of the U. S.

—Article and photos by Ward C. Degler, LTJG, USN



This Is 'Quality Control'

NEAR-PERFECT work is not good enough to satisfy the inspectors in Training Squadron Seven's Quality Control Division. Quality control—common in the Navy today—is a system of rigid checks and double-checks, by trained inspectors, of all maintenance work. VT-7, whose jets are used in the training program at NAAS Meridian, Miss., has 18 such inspectors, including two Marine captains, three CPOs, 10 PO1s, one third class and two non-rated men.

When they inspect the training squadron's planes their standards call for absolute perfection, as maintenance men can tell you. The caliber of maintenance work soon approaches this degree of excellence.

The Quality Control Division also maintains the squadron technical library, trains and qualifies other inspectors and briefs test pilots.

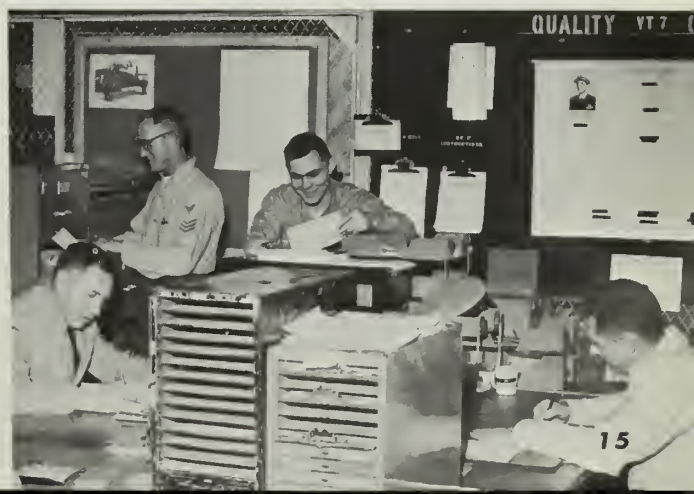
An inspector's knowledge transcends that required of his own rate; though he may be a metalsmith he must be capable of checking electrical and mechanical work.

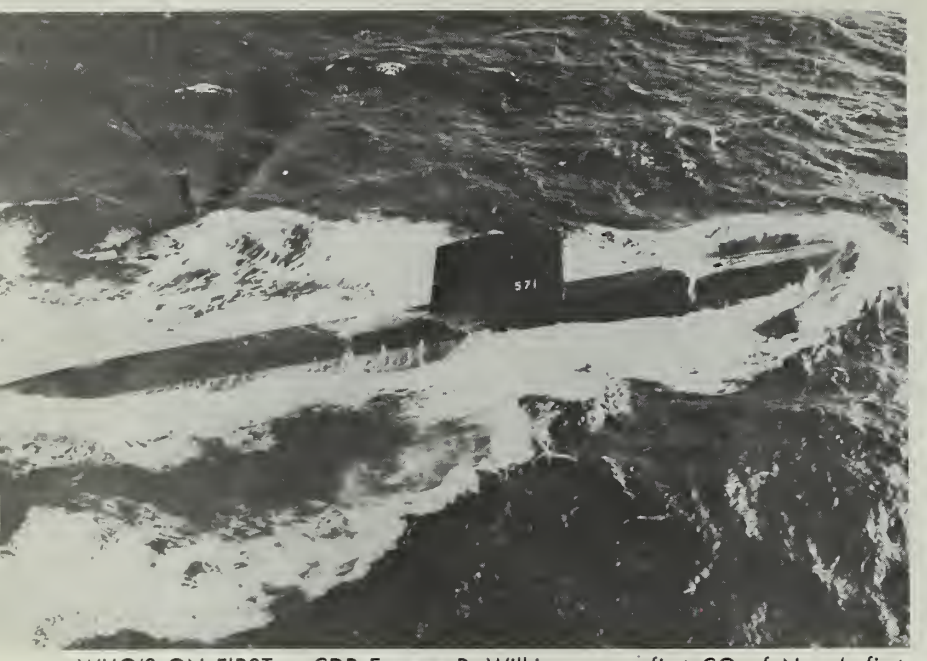
The division feels it must be the best in the squadron to maintain the standards of VT-7. In fact, the division claims it's not just the best in the squadron — it's the best in the whole Navy.

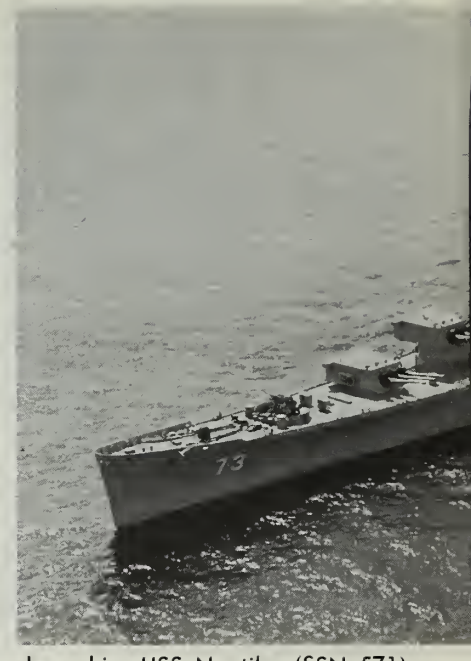


Top: *Quality Control Division inspectors of VT-7 demonstrate some of the many points on a plane that they check.* Right: *Prospective plane captains receive the word on ejection seat.* Bottom Right: *Records and files are kept up to date in division office.* Bottom Left: *Training jet is checked by inspectors at NAAS Meridian, Miss.* —L. Smith, ADJC, USN









WHO'S ON FIRST — CDR Eugene P. Wilkinson was first CO of Navy's first nuclear ship, *USS Nautilus* (SSN 571).

Shooting Down the

In the ancient Navy sport of claiming a record first, there is always room for argument. In fact, there is almost as much satisfaction in shooting down a record as there is in claiming one.

Last November, ALL HANDS *went out on a limb and recorded for a short-lived posterity the claims of Navymen and their ships and units.*

In this issue we publish the first and, we hope, the last installment of counter claims. Get your guns ready.

WE ENJOYED the article "Here's a Toast to the Navy's Most" in the November issue, but we must take exception to a claim made regarding USS *Targeteer* (YV 3), which said she is the world's smallest aircraft carrier. This is not the case.

USS *Kalmia* (ATA 184) is, in fact, the world's smallest aircraft carrier, having an over-all length of 143 feet. This is quite a difference in size compared to *Targeteer's* length of 206 (which you gave as 306) feet.

Don't let the ATA designation throw you. *Kalmia,* whose primary mission is launching target drones, also has complete facilities for launching and recovering fixed-wing aircraft, including a permanently mounted catapult on the forecastle. We concede that *Targeteer* is the smallest ship officially designated for carrying aircraft. However, *Kalmia,* which is capable of performing other jobs in addition to her primary one, is actually the world's smallest aircraft carrier.—K. R. Cole, Jr., Executive Officer, USS *Kalmia.*

I claim that the smallest aircraft carrier is USS *Kalmia* (ATA 184).—A. C. Weigelt, Jr., YN1, USN.

• *We're not judging, but it appears to us that* Targeteer *still has a claim because of her designation. Happy to hear of* Kalmia's *versatility, though.*—ED.

IN THE ARTICLE "Here's a Toast," you stated that USS *Nicholas* (DD 449), commissioned 4 Jun 1942, claims to be the oldest continuously active destroyer. Someone has overlooked the fact that *Nicholas* was inactivated on 1 Dec 1945, placed out of commission in reserve on 12 Jan 1946, and remained so until 19 Feb 1951, when she was recommissioned and designated an antisubmarine destroyer.

This fact, I believe, now makes USS *Allen M. Sumner* (DD 692) the oldest continuously active destroyer in service, with her commissioning date of 26 Jan 1944.—R. F. Trippett, YN3, USN.

• *Your information concerning the inactivation and decommissioning of* Nicholas *is correct. And, as far as we can determine,* Sumner *is the oldest continuously active destroyer still on active duty.*—ED.

CONCERNING THE CLAIM of USS *Waldron* (DD 699) taking the heaviest recorded roll (60 degrees)—during the typhoon of 18 Dec 1944 off Luzon, USS *Dewey* (DD 349) took a roll of 75 degrees and recovered. Several other destroyers recovered from rolls of 70 degrees. This claim is substantiated in a letter of 13 Feb 1945 from CINCPAC to the Pacific Fleet and Naval Shore Activities. For further information, consult NavPers 16118B, *Seamanship,* pages 210 and 211.—W. R. Clark, SOG2, USN.

• *The publication to which you refer confirms your statement. The letter, which we consider a masterpiece, is signed by Fleet Admiral Chester W. Nimitz, and describes the circumstances under which 31 vessels were caught in the typhoon. Three destroyers capsized and went down in the storm, and testimony established that three other DDs recovered from 70-degree rolls, and that* Dewey *recovered from a 75-degree roll.*—ED.

MAY I SUBMIT *my* claim as the



USS ST. PAUL flew 674-foot pennant.

Records

person who made CPO the fastest after having held all the intermediate rates? I enlisted in the Navy on 27 Mar 1941, the same day as Chief Rollins who claims the record. I was appointed SKC on 1 Jul 1944. This is slightly less than 39 months, making it one month faster than Rollins. —F. A. Hawkins, LT, SC, USN.

I READ WITH INTEREST your November issue, especially on page 16 where you recorded the "daddy claim of them all"—who made CPO fastest. Tell slowpoke Master Chief Rollins he must have been hiding in the bilges when they were passing out rates. I enlisted in the Navy on 19 Nov 1940, went through all the intermediate rates, and was appointed chief pharmacist's mate on 1 Oct 1943, beating his claim by almost six months (total time lapse of two years, 10 months, 12 days). Much, much later I made HMCS on 16 May 1959 and then HMCM on 16 Dec 1960—just to keep my hand in.—T. B. Moorhead, HMCM, USN.

I THINK I'M the junior E-8 in the Navy, or at least the junior MMCS. I was advanced to senior chief machinist's mate on 16 Nov 1963, and at that time I had 13 years, 19 days on active duty. Did I make a record? —E. H. Hawkins, MMCS, USN.



UP 'N AT 'EM—Troops board copters on flight deck of *USS Boxer* (LPH 4) for assault on beach. *Boxer* claims she has a record number of helicopter landings.

A. C. MCCLARAN, RMCS, USN, of Tactical Air Control Squadron 12, made senior chief after serving 11 years, four months, 15 days in the Navy. When he took the examination on 30 Jul 1963 he had been in the Navy for 11 years and 29 days. This squadron believes that Chief McClaran holds the record for making senior chief in the shortest time.—R. J. Dunn, Commanding Officer.

WHAT ABOUT SHORTEST time to make PO1 under current regulations? I joined the Navy on 16 Sep 1959 and made MMI on 16 Nov 1963—four years, two months later. I was lucky.—Bill Bowers, MM1, USN.

SMALL CLAIM—Drone launching tug *USS Kalmia* (ATA 184), with an over-all length of only 143 feet claims to be the Navy's smallest aircraft carrier.







DD CLAIMS—Old *USS Dewey* (DD 349) took 75-degree roll. *Rt: USS Allen Sumner* claims continuous service record.

• *Our staff artist, Chief Damage Controlman Tom Patrick, has a favorite saying which might be appropriate here: "You're never first."* —ED.

I HAVE BEEN interested in your series of "Most" claims. May I enter the list with: shortest time from enlistment (Detroit, 12 Aug 1915) to graduation from the U. S. Naval Academy (6 Jun 1919)—three years, nine months, 25 days? Much appreciation for a well-edited publication. —Lisle J. Maxson, CAPT, USN (Ret).

SOMEWHERE on USS *Bennington* (CVS 20) there is a man shorter than I. I am five feet nothing, the same as your shortest man mentioned in the "Most" article. So, if the guy that I very proudly looked down on aboard *Bennington* will come forth and identify himself, he can claim his rightful title.—A. L. Tokin, Jr., AA, USN.

I'LL CHALLENGE LT Fred Mann's correspondence course record. I doubt that mine is a Navy record, but I have completed a total of 131 correspondence courses, broken down as follows: 25 officer courses; 51 enlisted courses; 9 USAFI courses; 31 U. S. Army courses; 11 University of Maryland courses; and 4 civilian courses.

Keep up the good work on a great magazine.—D. N. Clyde, ENS, USN.

• *And thank you for taking time out from your studying to drop us a note.*—ED.

FOR THE CATEGORY of longest homeward-bound pennant, you mentioned USS *Augusta* (CA 31) and her 700-foot pennant. While USS *St. Paul* (CA 73) can't top this, she certainly is way ahead of USS *Salem* (CA 139), which trailed a 512-footer in 1958.

When *St. Paul* got underway from



SO LONG—At end of WW II time overseas *USS Essex* (CV 9) hoisted a 1538-foot homeward-bound pennant.

Yokosuka, Japan on 6 July 1962, she ended more than three years in the Far East, two and a half of them as permanent flagship of Commander Seventh Fleet. As the last line was cast off, a 674-foot homeward-bound pennant was unfurled. The pennant exactly equalled *St. Paul's* length. Were it not for the regulation that pennants cannot now exceed the length of the ship, *St. Paul* could have flown a pennant 740 feet long, surpassing that of even the old *Augusta*.—C. M. Zucker, LTJG, USNR.

IN THE LAST FEW months I have read a lot about homeward-bound pennants. In your November issue you say the old *Augusta* holds a record with a 700-foot pennant. I have taken this as long as I can without saying something to set the record straight.

USS *Essex* (then CV 9), upon departure from Japan at the end of World War II, hoisted a homeward-bound pennant 1538 feet long, which was soon carried away by the wind. Our boatswains made up another of the same length, which was unfurled just prior to entering Seattle, Wash. It flew for only a few minutes, but still it qualified as a homeward-bound pennant.—R. E. Chamberlain, QM1 (SS), USN.

• *Sounds like a fair entry to us. Anyone else remember details about the 1538-foot* Essex *pennant?* — ED.

WHAT DOES the record show for shortest-lived ship? Try USS *Barton* (DD 599): launched in January 1942, commissioned 29 May that year and lost in combat after a torpedo attack on 13 Nov 1942, for a service life of five and a half months. —V. C. Timmermann, USN (Ret), a survivor.

• *We would like to pay tribute now to the heroic crew of* USS Barton *which went down tragically after such a short fighting career. We have no simple way of determining if this was the shortest-lived ship in the Navy. Records confirm your information, however.*

This may be a little beside the point, but we do know of another tragedy of a short-lived ship—Vasa, *a man-of-war built in 1628 to help maintain Sweden's power in the Baltic against the threatened attack by the Hapsburg Empire.* Vasa *mysteriously sank two hours after launching and remained at the bottom of Stockholm harbor for over 300 years. On 4 May 1961, after several years of preparation,* Vasa *was raised from the mud. It is now being used as a museum.*—ED.

WHY DIDN'T YOU mention USS *Boxer* (LPH 4) in the "most" article? You said USS *Valley Forge* (LPH 8) had a "most" with 15,000 helicopter landings. *Boxer*, between 19 Jan 1959 and 1 Nov 1963, logged 46,519 helicopter landings as an LPH. In addition to this record, *Boxer* had 11,686 landings on the books from 1 Nov 1962 to 1 Nov 1963, and on 20 Aug 1963 she logged 938 whirlybird landings in a 12-hour period.

Any further elaboration on *Boxer* "mosts" would require at least a 10-page report, which we, in all our humility, would consider being rather boastful.—Air Department Office Staff, USS *Boxer*.

• *Chinese philosopher say: "He who calls laziness 'humility,' and boasts that he has something to boast about, but doesn't boast about it, never gets his ship's name in* ALL HANDS*—and inevitably asks, 'Why didn't you mention my ship.'"*—ED.

REPORTER HOWARD'S article on Navy "most" claims should certainly earn for him the title of "Journalist With Neck Stuck Out Farthest," despite his disclaimers that he is merely reporting claims, not judging them. With regard to the first vessel underway on nuclear power, perhaps he will concede that someone's foot is in someone's mouth, for the skipper of *Nautilus* on that historic cruise was CDR Eugene P. Wilkinson, USN, not CDR W. R. Anderson, who was the second skipper.—J. D. Alden, CDR, USN.

I HEARTILY concur with the foregoing. Reporter Howard certainly did put his foot in his mouth. I always knew him as such a sensible lad—conscientious, perceptive, thorough. Perhaps the strain of sorting out all those claims was too much for him. I'd give him the sack.

—Bill Howard, JO1, USN



LATEST RESULTS — More claims have been made as to who has the shortest time up the ladder to CPO.





HOW BOOT IT—Reserve recruits are briefed on ship's engineroom and pilot house during training session.



GRIM TRIM—Recruit at Philadelphia N.B. gets traditional haircut. *Below:* Naval Reserve recruits at Davisville, R. I., step out during drill session.



Boot Camp

SOME MONTHS BACK, 12th Naval District Headquarters received a request to jury-rig a recruit training center at Treasure Island, Calif., and stand by to pinch-hit for NTC San Diego. The order stated that the first wave of almost 300 recruit Reservists was due to arrive in nine days.

Reserve recruits are normally trained by one of the two Naval Recruit Training Centers. But NTC San Diego was fighting an outbreak of meningitis and taking no new trainees. All Regular Navy recruits

RESERVES learn fire fighting.





JURY-RIGGED — Temporary training centers were set up for recruits. (Yes, we noted that someone is out of step.)

Scores With a Pinch-Hitter

were being diverted to the Naval Training Center, Great Lakes.

Although Chicago's training center was large enough to train the double load of Regular Navymen, it could not handle more than its normal load of Reserves at the same time.

The Reserve recruits, numbering almost 4000, had to be trained somewhere. Treasure Island was chosen first, and in August two similar (though smaller) Reserve recruit training centers were established in the First and Fourth Naval Districts.

Treasure Island Navymen of the 12th Naval District had only nine days to get the program rolling. Arrangements were made for haircuts and classrooms and for use of the swimming pool and rifle range. Drill instructors were furnished by a Marine company in the area. Treasure Island's Navy and Marine Corps Reserve Training Center agreed to assist in on-board processing.

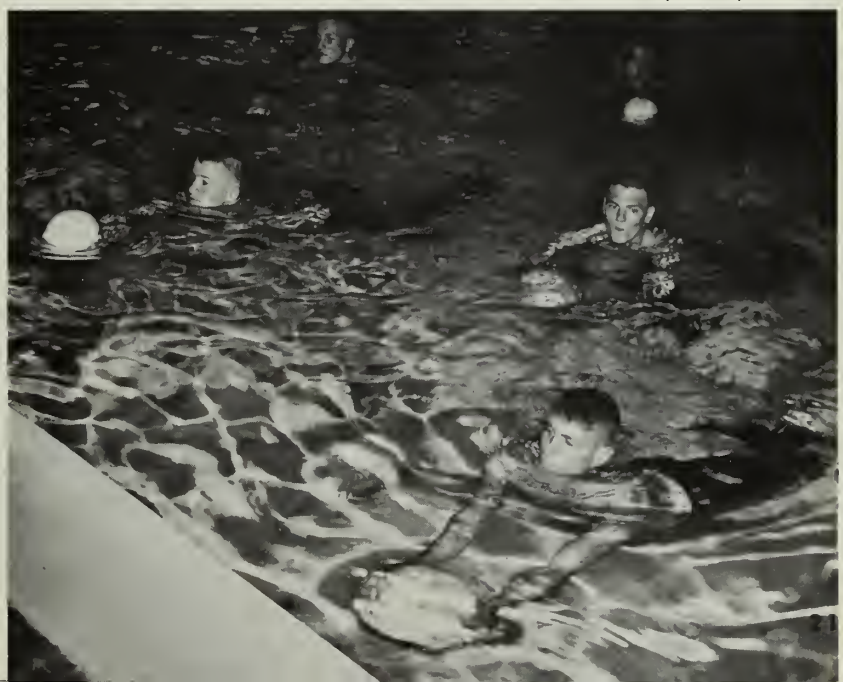
Navy planners then faced the personnel problem. A Naval Reserve training staff consisting of 12 officers was needed. Inactive Reserve officers from commands in the Eighth, 11th, 12th and 13th Naval Districts volunteered for active duty and arrived well before the first recruits.

Most of the enlisted staff was also comprised of Reservists. Since many of these Reservists could not arrange an absence of more than two weeks from their civilian occupations, overlapping tours of duty were arranged to provide the needed continuity.

An officer and four enlisted men

ON TOP—During survival class Reserve recruits learn how to use their white hats to help keep afloat.









PRESENT ARMS—Recruits toughen arms with push-ups and (rt.) receive instructions in the manual of arms.

arrived from NTC San Diego to help organize the first two-week class. They brought with them the curriculums used in San Diego, plus web belts, guidons and the like. Drill rifles were loaned to the command by local NROTC classes.

WHEN THE RECRUITS arrived at Treasure Island they received the standard boot camp treatment. Their hair was cut, they were told to memorize their serial numbers and taught the difference between a chief and a seaman recruit. Then they were issued their seabags and put in the hands of their company commanders and Marine drill instructors.

First they learned to march. And when they were not pushing a piece they were lectured on first aid, hygiene, naval history, leadership, citizenship and the Uniform Code of Military Justice. They learned to swim, shoot, fight fires, and survive nuclear, biological and chemical warfare attacks. Before leaving boot camp they went aboard ships of Radar Picket Squadron One for shipboard indoctrination and familiarization classes.

DAY OFF—Reserve recruits head for the chapel at Philadelphia Naval Base.



A month before Treasure Island's boot camp was due to close, two more Reserve recruit schools were established at the Philadelphia Naval Base and the Naval Construction Battalion Center, Davisville, R. I. to relieve overcrowding at NTC Great Lakes.

Guided by outlines of Treasure Island's program, the two new training centers called inactive Reservists, arranged for the use of facilities and stood by with barber's clippers and hypodermic needles. Great Lakes sent each a company commander. By nightfall, 11 August, the first groups had arrived from 25 eastern states.

After uniforms were issued, the recruits were taught the art of close order drill. Taps, reveille, chow call, drill, study, drill—no different from San Diego or Great Lakes.

The men of each class returned to their homes after completion of two weeks' training. Later they will be called to serve their obligated 24 months' active duty.

In September the last companies paraded in the traditional brigade review, the jury-rigged boot camps closed, and the inactive Reserve training staffs returned to their civilian jobs. And, of course, San Diego went back to pushing boots.



SURE SHOT—*Bon Homme Richard* sends off 50,000th accident-free launch.

Bonnie Dick's Cool Cats

WHO HAS BEATEN 50,000? This is the question asked by the catapult crew of USS *Bon Homme Richard* (CVA 31) since the 50,000th successive accident-free cat launching.

While the carrier was enroute to Hawaiian waters for an Operational Readiness Inspection, the cat men invited the ship's skipper CAPT G. S. Morrison, to fire the milestone shot. CAPT Morrison who is a former flight deck officer, donned a yellow shirt and green helmet and, after a thorough safety check, gave the signal for blast off.

Safety is no accident as far as the cat crew is concerned. Long hours of intensive training and practice have resulted in precision teamwork which successfully produces rapid and safe catapult launches.

Each individual of the two 18-man crews feels a heavy responsibility in his job function. It is no wonder that every man involved feels justifiably proud of his particular role in getting the "birds" aloft.

Whether he is a hookup man, console operator, bridle man, or "slingshot" officer, the cat team member finds no detail pertaining to a safe launch too small to escape his watchful eyes.

With *Bon Homme Richard* on her way to join the Seventh Fleet's front line of defense for a seven-month deployment, the cat men hope to log thousands of additional successful launches from the carrier's deck.

AT SEA—*USS Bon Homme Richard* (CVA 31) refuels while with Seventh Fleet.

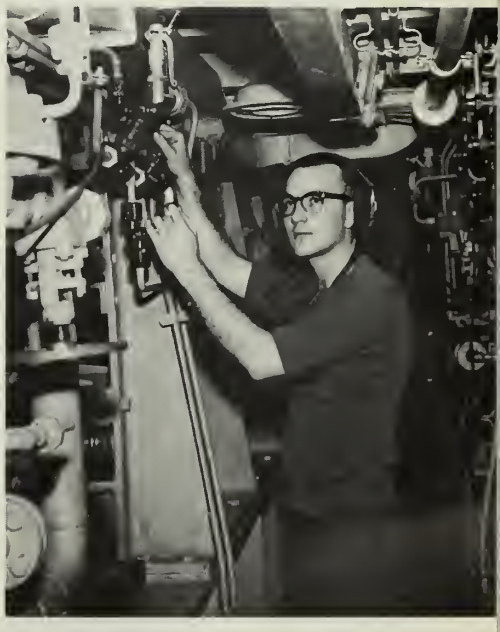




DECK EDGE operator waits go sign.



ON THE ALERT—Members of catapult crew man the console. *Below:* Operator mans below-deck launching equipment aboard *'Bonnie Dick.'*



LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

It's Official But Not Navy

SIR: I would like to know if it is lawful for members of the military service to send their income tax returns into the Internal Revenue Service in franked Navy Department envelopes.

In my opinion, mailing a tax return is official business, and people stationed overseas a long distance from the Internal Revenue Service should at least be granted free postage for mailing their returns to the government. — R. G. S., DK2, USN.

• *Hoot, mon. We think your Uncle Sam would take a dim view if you were to mail your tax return in a franked envelope.*

The official business referred to on the envelope means official Navy *business. Mailing your tax return isn't official Navy business. Now, is it?*

So stop moanin', lad. It doesn't cost you any more for postage than it does a tax payer living just a few blocks from the Internal Revenue Service.—ED.

That Pennant Is Flying Again

SIR: A photo caption in the October 1963 issue mentions the homeward-bound pennant—610 feet long—of USS *Springfield* (CLG 7). I thought the length of a homeward-bound pennant was calculated on the basis of one foot for each month the ship is away from its home port. Using this scale, *Springfield* would have been on a cruise lasting 50 years, 10 months—so I suppose I must be wrong. What does ALL HANDS say about it?—J. H. N., SO1 (SS), USN.

• *We haven't heard about any ship, including* Springfield, *completing a 50-year cruise recently, so we agree that you must be wrong. Here's what we know about the subject, our authority being DNC 27* "U. S. Naval Flags and Pennants, Descriptions, Uses and Customs:"

A vessel which has been on duty outside the limits of the United States continuously for a period of nine months or more may fly the homeward-bound pennant upon getting underway to proceed to a port of the United States. This pennant may be displayed until sunset on the day of arrival in a U. S. port of destination.

The homeward bound pennant is divided vertically into two parts; that portion next to the hoist is blue and the fly is divided horizontally into halves, the upper red and the lower white. In the blue portion is placed one white star for the first nine months that the ship has been continuously on duty outside the U. S., plus one additional white star for each additional six months. The over-all length of the pennant is normally one foot for each officer and man on the ship who has been on duty outside the United States in excess of nine months. Where this produces a pennant excessively long, its length is kept within practical limits, but in any event the length is not to exceed the length of the ship.

The relative proportions of the pennant shall be as follows:

- *Length of pennant: 1*
- *Width at hoist: .005*
- *Width at fly: .0015*
- *Distance between centers of stars and from centers of end stars to ends of blue portion: .004*

(Hence, the length of the blue portion is derived by multiplying the number of stars, plus one, by .004.)

- *Diameter of stars: .003*

Upon arrival in a port of the United States, the blue portion containing the stars is presented to the commanding officer. The remainder of the pennant is divided equally among the officers and men of the ship's company.

As we understand it, use of the homeward-bound pennant was traditional in the Navy for many years, but achieved official status in March 1952 when the above specifications were incorporated in DNC 27. There were no restrictions on the length of the pennant until Change Four to DNC 27 was published in June 1961, at which time the length was limited to length of the ship.—ED.

Size of the National Ensign

SIR: I have wondered what authority governs the size of the national ensign flown at our station and whether the same size ensign should be flown on holidays as on other days.—W.E.B., LT, USN.

• *The size of the national ensign flown by activities of the shore establishment is a matter of local regulation unless, of course, higher authority assumes control. There is no Navy-wide directive on the subject.*

If no authority higher than your station commanding officer has specified the ensign's size and its size is not indicated by the station allowance list, your station CO has the authority to make the determination.

His decision will, most likely, be influenced by the pole's height.—ED.

Correct Inspection Procedure

SIR: I recently inspected a large squadron on the West Coast and noted, with dismay, that as I approached each division, the division officer merely called his men to attention, saluted and announced that the division was ready for inspection.

I made quite a point of this during the inspection critique and pointed out that, by Navy tradition and the *Landing Party Manual*, when the inspecting officer approached within six feet of a division officer, the division officer would give the order, "hand salute" then turn to the inspecting officer and say, "Good Morning Sir" or "Good Morning, Captain" then turn to his division and give the order "Two."

Following this he would report about as follows: "Sir, this is the X division, with 88 men assigned, 53 men at quarters, 25 authorized absentees, no unauthorized absentees—ready for inspection, Sir."

The squadron commander concerned very respectfully called to my attention that such procedure is not required by the *Landing Party Manual*.

Upon checking, I found that indeed the *Manual* merely prescribed that, upon the approach of the inspecting officer, the division officer will call his men to attention and salute.

My question is: Is the method I have described above still the accepted method of presenting a division for inspection or has it become *passe* or, if it has not, wherein is it prescribed officially? —W. R. S., CAPT, USN.

• *The method you described is not passe. It is that given in "Shipboard Procedures" (NWP 50(A)) and is, therefore, for guidance of commands afloat.*

The "Landing Party Manual" is normally used for guidance in commands ashore. "Shipboard Procedures," though written for afloat commands, corresponds to commands ashore in many respects.

It could be assumed that, unless the

individual command or inspecting officer prescribed otherwise, the procedure to follow would be: Commands ashore —"Landing Party Manual;" commands afloat—"Shipboard Procedures."—ED.

Niagara's Resurrection

SIR: I recently read a historical item in our local paper which was reprinted 50 years after its original publication date. It concerned USS *Niagara* (Commodore Perry's ship during the Battle of Lake Erie) which, according to the article, had been towed in from Lake Michigan to a Sheboygan, Wis., dock.

I had thought, up to the time I read this article, that *Niagara* had long since vanished. Can you tell me what happened between 1813 and the day in 1913 when she was towed to Sheboygan? I would also like to know if she is still afloat and, if so, where she is located.—J. M. S.

• *A few words might be appropriate here concerning* Niagara. *As you may know, she didn't enter the battle as Perry's flagship. His flag first was in* USS Lawrence, *which was disabled by the British during the battle.*

Perry brought down his flag, got into a boat and was rowed to Niagara *literally under the muzzles of the British guns in one of the greatest cliff-hanging escapes of naval history.*

Once Perry was on board Niagara, *he ordered the United States ships to regroup.* Niagara *broke the British line by firing such deadly broadsides that the British were thrown into confusion.*

Two of the larger British brigs ran afoul of each other; Niagara *signaled for close action and ran across the bow of one of the fouled ships and the stern of the other raking them both. She then went on to other British ships, followed by the little one- and two-gun vessels of the fleet.*

Perry was rowed back to Lawrence *to take the British surrender, although* Lawrence's *crewmen were, by this time, almost all dead or wounded.*

After the War of 1812, Niagara, *along with the other ships of Perry's fleet, was dismantled and sunk at Misery Bay (now Presque Isle Bay) at Erie, Pa., where she remained until 1913. She was raised and restored at that time for the Perry Centennial and was towed around the Great Lakes and back to Erie.*

The old ship had to be rebuilt again in 1939, but she is still afloat and is the property of the state of Pennsylvania.

She can be seen near the Public Docks on lower State Street in Erie. —ED.

Can a P-500 Pump Fuel?

SIR: In the November issue of ALL HANDS (page 28) a letter to the editor stated that a P-500 "fuel pump" was jury-rigged for the transfer of fuel oil between the destroyers USS *Norris*



STANDING ORDERS—Perry's flag is moved from Lawrence to Niagara during Battle of Lake Erie in 1813.

(DD 859) and *Bristol* (DD 857).

I believe that the P-500 pump is never used to transfer fuel of any type, since the liquid being pumped is also circulated to cool the pump's engine.

On the other hand, the P-500 may be used to remove oil from a compartment if it is equipped with an eductor. Then the suction would be taken from the sea or other source of water and no oil would reach the engine cooling passages.—J. W. M., DCCM, USN.

• *As you say, the P-500 is not a fuel pump. The P-500, an oversized handy-billy, was designed to be used fighting fires and definitely not to pump inflammable liquids.*

However, rather than disproving the commander's claim, the fact that the P-500 cannot normally be used in pumping fuel tends to speak for the ingenuity of Bristol *and* Norris.

The writer didn't say how the jury-rigging was done, but we can make a guess. At any rate, we doubt that it was done with the eductor. If an eductor were used the pump could not be called a jury-rig, since the eductor is often used with the P-500.

For another thing, any fuel pumped with a P-500 and an eductor would arrive at destination contaminated with water—brine—unless the ship had an abnormally large supply of fresh water.

However, there is at least one way to rig a P-500 for pumping fuel. First, you disconnect the quarter-inch line that runs from the pumping line to the cooling system. (All the liquid being pumped does not run through the cooling system.) Then, after plugging the holes in the pumping line, you connect the cooling line to an outside source of water.

When this has been done, oil or other fuels may be pumped through the P-500, since the fluid being moved would never enter the cooling system.

We are guessing that this is the method used by the destroyermen. Perhaps Commander Rienstra will clarify the matter for us—we'll be glad to publish his explanation.—ED.

Whose Reference on Those Orders?

SIR: Here's a hypothetical situation for you to ponder. Suppose the commanding officer of USS *Drybone* (DDR 1) receives BuPers message orders directing detachment of an officer from the ship to a new duty station.

On the basis of the message and, in accordance with the *BuPers Manual*, the orders are written in letter form for the commanding officer's signature.

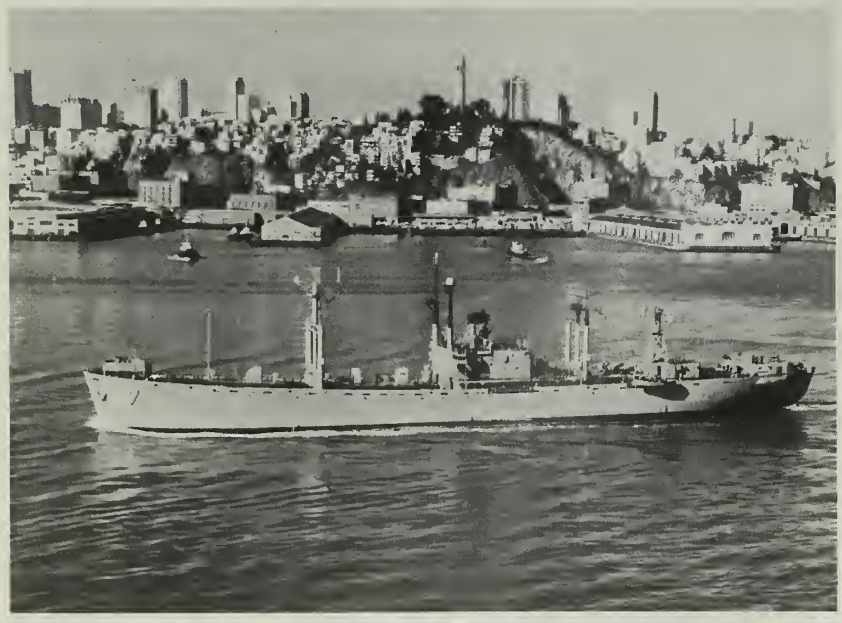
The question is: Does the endorsement designation line reference the orders of the CO, *Drybone*, or would it reference the BuPers message orders?

I am of the opinion that it is an endorsement to the CO's orders and not to the BuPers message. Am I correct? —F. T., YN1, USN.

• *The answer to your question isn't*

HISTORIC BRIG USS *Niagara*, raised from bottom of Misery Bay and rebuilt in 1913, prepares to begin centennial cruise of Great Lakes.





RADAR PICKET ship USS *Picket* (AGR 7), called an ocean radar station ship (YAGR) until reclassified in 1958, steams in San Francisco Bay.

specifically spelled out in regulations or directives so we asked for an opinion from the people in the Bureau who write officers' orders.

They disagree with you and here's the reason why: In all communications requiring endorsements, each endorser refers to the original letter or message.

In this case, it is the BuPers message which started the ball rolling rather than the CO's letter. Therefore, it would be the Bureau's message date-time-group which should be referenced.—ED.

Sew-Sew Job on Rating Badges

SIR: It has always been my understanding that gold rating badges should be sewn on by hand, using a blind stitch, whether on a CPO, PO, or Wave uniform. All other rating badges, I thought, were to be sewn on by hand or by two rows of machine stitching.

The proper method of attaching rating badges was questioned at a recent personnel inspection, and investigation revealed that Articles 0651-3 and 0862-3 of the *U. S. Navy Uniform Regulations* agree with me, but Article 0762-6 does not. Do the articles conflict by accident or by design?—R. L. K., SKCM, USN.

• *The articles do not conflict. Article 0651-3 applies only to CPOs, and article 0862-3 applies to Waves. Your understanding is correct in these two categories. Gold rating badges must be sewn by hand with a blind stitch, and other badges may be sewn with a blind stitch or by machine.*

Enlisted men below CPO, however, must have their blue wool melton and white twill badges attached by machine. They must be sewn on with two rows of plain machine stitching one-eighth inch apart with thread that matches the color of the uniform.

Rating badges worn on blues by the lower six pay grades have a melton background, which does not ravel and is not hemmed. Blind stitching, which grips only the extreme edges of the badge, would pull loose in this type of material, especially since the uniforms, both white and blue, are either hand or machine washable. Machine stitching is stronger and more satisfactory for the blue melton uniform. For uniformity and because of the durability of machine stitches, the same application is required for white uniforms.

There is a good reason for the distinction made between CPOs and Navymen below CPO. The Chief and Wave uniform is made of serge, gabardine or tropical worsted – all materials which will ravel—so the edges of the rating badge must be turned under or hemmed. Also, this type of uniform is usually dry-cleaned, so little wear and tear is imposed on the stitching.

Article 0762-6 of "Uniform Regs," which specifies the stitching regulations for enlisted men below CPO, is being considered for change by the Permanent Naval Uniform Board. The change will clarify the regulations to permit enlisted men who wear tailor-made uniforms of materials other than melton to use blind stitching instead of machine stitching. —ED.

Cavalier Snipes at Picking

SIR: The September 1963 Letters to the Editor Section of ALL HANDS carried a picture of USS *Picking* (DD 685) and said she claimed a Navy first in getting the Engineering Excellence Award for the sixth time.

On behalf of USS *Cavalier* (APA 37), I dispute the claim. *Cavalier* won her gold "E" with a hashmark for engineering excellence in February 1963. On 20 February it was made official.

I hereby claim a first for *Cavalier*.—E. H. F., YN3, USN.

• *CNO doesn't maintain a file of awards for departmental excellence issued by type commanders and, if we were to check each claim* ALL HANDS *receives with the appropriate type commander, it would place a needlessly heavy burden upon them.*

ALL HANDS *passes on bona fide claims of records to its readers, and frequently watches them go down in flames. You might call it survival of the fastest.*



HAPPY OCCASION—Scenes similar to this one at Norfolk, Va., are repeated many times each year in U. S. ports.

Someone must be first and foremost, but sometimes a record cannot be verified until a claim has been staked. Nevertheless, we invariably wish all record claimers well.

Whether or not a record is actually achieved is immaterial. The accomplishments reported almost always reflect unusual achievement, merit our congratulations and reflect credit upon the Fleet.—ED.

More About Pigeons

SIR: Concerning pigeons at Mare Island Navy Yard (Taffrail Talk, Sept 1963), in my book, *A Long Line of Ships*, I mentioned that the birds were installed about the time of the Spanish-American War and trained for use in a one-way messenger service.

They were incapable of taking a message off Mare Island, but if removed from the island they were willing to take a message back. Pigeon-keeper Joseph N. Richards sent birds out on every transport leaving the West Coast. In May 1897 one of his birds carried a message back from the steamer *Alameda* from over 400 miles at sea—Arnold S. Lott, LCDR, USN (Ret.).

SIR: After reading the Taffrail Talk item about pigeons at Mare Island and the letter in the November issue which mentioned Lakehurst's homing pigeons, we decided to volunteer information on the demise of the official bird brigade.

Your reader states that to his knowledge the loft was discontinued in 1931. True, the building where the birds were kept was demolished at that time; but a new loft was set up at another site on the base. Pigeons continued in use for relays during and after the war.

NAS Lakehurst was previously the hub of naval lighter-than-air airship operations. Pigeons were a means of communication between the airships and their home base, since most of the time radio silence had to be maintained. The homing pigeons did this, and did it well.

After the war, however, the usefulness of pigeons gradually diminished, and in 1948 it was a sad case of "Bye Bye Birdie." But apparently these birds had learned their job too well, for subsequent attempts to rid the station of pigeons proved easier said than done. Lakehurst was their home, and if they couldn't get back in their cozy loft, then anywhere else, including the numerous hangars would serve the purpose.

Today the descendants of these pigeons still call NAS home—much to the dismay of our umbrella-carrying hangar watches. What canals are to Venice and cable cars to San Francisco, pigeons — unfortunately — are to Lakehurst.—SIO, HU-4.

• *We won't propose a solution to NAS Lakehurst's problem of how to get rid of the pigeons (incidentally, how did Mare Island accomplish this seemingly impossible feat?); but we can suggest how the present unpropitious situation might be turned into an enjoyable sporting activity.*

How about pigeon-flying, or the sport of racing homing pigeons? Ordinarily the birds must be specifically bred and trained for this purpose, but Lakehurst's pigeons already have "homing" blood, so there remains only the training.

The training and subsequent racing of these pigeons might turn out to be good fun—and it might help to restore a certain dignity to the present generation of pigeons, whose ancestors were so useful to the Navy.

We're sure that, within our multi-talented Navy, someone can pass the word to those interested in the care and training of homing pigeons.—ED.



MASTER CHIEF Radarman Carrey Nelson is congratulated by RADM Marshall E. Dornin during ceremony transferring him to Fleet Reserve.

Why Only One Sleeve?

SIR: I have been asked why Navymen don't wear their rating badges on both sleeves of their uniform. Army, Marine and Air Force personnel are always seen with their specialty or rating badges on both sleeves but never the Navyman.

I am a Navy recruiter in a predominantly Army area and have been embarrassed by my inability to come up with an authoritative reply.—R. J. K., ENC, USN.

• *The next time anyone asks, just tell them the Navy likes it that way. Anything else, according to Navy thinking, would detract from the uniform's sharp, clean and uncluttered appearance.*

The present regulations which prescribe wearing rating badges on only one arm resulted from a post-World War II effort to correct various inconsistencies in the manner of wearing insignia and make the uniform as smart, conservative and neat as possible.

At one time, you may recall, rating badges were worn on the right or left sleeve, depending on the wearer's branch; distinguishing marks were worn on the opposite sleeve.

In 1948, when a new rating structure became effective, however, Navymen were required to wear their rating badges on the left sleeve between the shoulder and elbow and to wear all brassards on the right sleeve. The pay grade and rating group of non-rated men were indicated by group-rate marks and white cuff markings on dress blue jumpers were standardized at three stripes.

If you recall the old system which permitted branch marks on the shoulder seam and varying numbers of cuff marks (to mention only two variations), you will probably agree things are much simpler now.—ED.

TOP BOOTS—Rose Marie Drake, AN, USN, (left) received American Spirit Honor Medal, Honorwoman and Military Award, and Lynne Mary Luggen, SA, USN, got award for top scholastic average during recruit graduation.





GREETINGS—Members of MCB Seven stand by as *USS York County* (LST 1175) makes port at Roosevelt Roads, P. R., with cargo of construction equipment.

Now, Back in the Old Navee . . .

SIR: My friend Captain Mossbottom, long retired, thinks it's about time you young squirts pass along some word concerning what the old Navy was *really* like. I realize the old-timer is a nit picker, has a flapper lip, and likes to beat his gums, but if the ALL HANDS gang listens to his wild ramblings now and then you are sure to pick up some pointers of value.

The old gent has told me many a time that all he wants to do is help keep ALL HANDS on an even keel. With this in mind, permit me to pass along what Captain Mossbottom had to say the last time I saw him:

"Look at this November number of ALL HANDS, sonny. At the bottom of page 27 this young ensign writes 'We have several officers in USS *Saratoga* . . .'

"Now here's a young lad who knows how to talk real Navy language. Notice that he said *in* USS *Saratoga*.

"Now look at what that ALL HANDS writer fella did in 'Taffrail Talk' on page 64. ' . . . saw duty on *Lexington* and *Kearsarge* . . . ' This is absolutely wrong!

"When you use USS followed by the name of the ship, you don't use *the* in front of it. If you don't use USS, you can say '*the Saratoga*,' for example.

"You always serve *in* a ship, never *on*. You don't ride *on* a car, do you? Of course not. You ride *in* a car and you ride *in* a ship. You don't live *on* a house, do you? You live *in* a home and, as your ship's your home, you live *in* the ship.

"The whole argument was debated a few years back by a group of old flag officers, and the final consensus was *in* a ship. You tell those ALL HANDS fellas to be real Navy and never again say that anyone served or had duty *on* a ship.

"Also tell them that on page 26 there's another mistake concerning morning colors. ALL HANDS says that 'down comes the prep pennant' and the bugler sounds attention, and then they play the national anthem. Baloney! First of all, prep is not and never has been a pennant! The 'Blue Peter' is and always was a *flag!* Cast, Easy, Dog, Fox and George used to be pennants a long time ago, but they were all changed to flags. The only pennants are *numerals.*

"And look at this business on page 19 about *Augusta* having the longest homeward-bound pennant, with one of 700 feet. Bah!"

The Captain then produced a cruise book entitled *European Cruise of USS Pittsburgh, Flagship, Naval Forces Europe, October 1922–July 1926,* from which I quote the following:

"Promptly at 9 a.m., Saturday, 3 July 1926, the good ship *Pittsburgh* cast off all lines, with her *850-foot* silk homeward-bound pennant hoisted at the mainmast, got underway for New York, departing from Antwerp, Belgium.

"At 9 a.m. Saturday, July 17th, the *Pittsburgh* passed the Statue of Liberty, thus completing—for a second time in her career—a tour as Flagship of our Naval Forces in Europe, having steamed 54,706.5 miles since leaving Philadelphia on October 2nd, 1922, making 154 stops at various ports of 28 countries or their possessions."

Captain Mossbottom adds that he was the only officer to make the full cruise in Europe from the time *Pittsburgh* left until finally coming back to New York. He stated that the 850-foot pennant was a fact; that it streamed just before the ship went down the river from Antwerp. At the 400- and 600-foot spots large hydrogen balloons were tied to the pennant to help stream it and keep it up.

"Even so," the Captain added, "with a great big arc floating out behind the ship, the tail end of the pennant dragged in the water for about 100 feet or so. Coming back up the East River in New York, only about 300 feet were played out, as it was a drizzly, overcast day and the full pennant couldn't be streamed."

The *Pittsburgh* cruise book further shows that from 6 August to 3 Sep 1923, the ship visited no less than seven countries. They were Denmark, Sweden, Finland, Estonia, Latvia, Danzig Free City, and Germany, in that order. "Put that in the record book," insists Captain Mossbottom.

As for the length of steaming in one ship (15 years), as related on page 18, you're sure to get the book thrown at you from some of Captain Mossbottom's old USS *Nevada* (BB 36) shipmates. He told me that two chief boatswain's mates in the *Nevada,* Sammy Cohen and a man named Ghieslen, went on board as apprentice boys and advanced all the way to CBM. The captain thinks that Sammy Cohen put in his full 20 in the *Nevada* without ever having left her.

Incidentally, the skipper who took over *Pittsburgh* in 1922, Captain John V. Klemann, is now 88 years old and lives in Washington — Isaiah Olch, CAPT, USN (Ret.).

• *Thanks for passing on the comments of Captain Mossbottom with regard to "Here's a Toast to the Navy's Most," which appeared in the November 1963* ALL HANDS. *Although we are in a position to receive comments and criticism from many quarters, few are as refreshingly pungent as those of the good Captain.* *(For others see page 16.)*

Neverthless, one small point still bothers us. Captain Mossbottom takes us to task for using the term "down comes the prep pennant . . ." He says it should be called a flag and goes on to state "The only pennants are numerals."

Since Captain Mossbottom says it's so, that's the way it is. However, if we are confused so, too, are a number of other landlubbers. "The Bluejackets' Manual" (page 562, 17th edition, 1963) makes reference to the prep pennant; "Boatswain's Mate 3 & 2 — NavPers 10121-C" (page 306, 1959 edition) has the prep listed under the heading Special Flags and Pennants; "Signalman 3 & 2—NavPers 10135-A" (page 48, 1961) mentions prep under the heading Government Pennants.

According to Captain John V. Noel, Jr., in his "Naval Terms Dictionary (1952), "Signalman" may have a point here for Noel defines a pennant as "A flag that is smaller at the fly or outward end."

DNC 27, "U. S. Naval Flags and Pennants," and ATP 1(A) Vol. II, "Allied Naval Signal Book," would also appear to be equally confused, for they make

reference to more than 20 official Navy pennants (excluding the numeral pennants.) The church pennant, first used in the U. S. Navy aboard USS Somers *in 1842, is one of the oldest pennants in current use. The Prep pennant as known today came into being in 1951 at which time the "blue peter," currently called the Papa flag became another alphabet flag.*

We trust that Captain Mossbottom won't take it amiss if, following the lead of this illustrious group we should inadvertently refer to a pennant as a flag, or vice versa.—ED.

There Were No CVAs in '46

SIR: In "What's in a Name" of the August 1963 issue you said USS *Valley Forge* (LPH 8) was commissioned as a CVA. I believe she was commissioned as a CV, since there were no CVAs at that time. The only other carriers were CVB, CVL and CVE.

If *Happy Valley* was commissioned as a CVA, however, she can add one more stripe to her career.—Clayton H. Counts, SMCA, USN.

• *You're right*—Valley Forge *was commissioned CV 45 in 1946 and was not designated CVA until some years later. There were no attack aircraft carriers until October 1952.*—ED.

Adams *Is* No King

SIR: In the October issue of ALL HANDS, there was a picture which was captioned "USS *John King* (DDG 2) fires one to evaluate missile system."

The ship in the picture was DDG 2, all right, but her name is *Charles F. Adams*. USS *John King* is DDG 3.

The men on board my ship, USS *Dahlgren* (DLG 12), thought this should be brought to your attention before an *Adams* man appears in your doorway swinging a cutlass.—S. S. S., SN, USN.

• *Thanks for the alarm which, incidentally, other ships also sounded.*

So far, we have seen no cutlasses flashing. When and if we do, we will try, if we have time, to refer the wielder of the weapon to the people who sent us the erroneously captioned picture in the first place. That, of course, is an explanation, not an excuse.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS MAGAZINE, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Louisville* (CA 28) — A reunion wil be held on 25 July at Villa Pace, Smithtown, L. I., N. Y. For details, write David A. Dolan, 140 Church St., Kings Park, N. Y.

• USS *Gleaves* (DD 423) — A reunion is scheduled for 26-28 June, at Louisville, Ky. For information, write to Vernon G. Mathews, 3100 Lafayette Rd., Indianapolis, Ind.

• USS *Mobile* (CL 63) — A reunion will be held on 4 July at Mobile, Ala. For details, get in touch with Travis N. Price, Nacogdoches Business College, Nacogdoches, Texas 75961.

• USS *The Sullivans* (DD 537) — The third reunion of World War II veterans who served on board has been scheduled for 14-16 August at the Park Sheraton Hotel, New York City. For information, write to Robert R. Sander, 325 Thatcher Ave., River Forest, Ill.

• USS *Oklahoma* (BB 37) — A reunion will be held 1-3 May, at the Sheraton Atlantic Hotel, New York City. Write to Edward H. Lutz, 673 Lindley Rd., Glenside, Pa.

• USS *Natoma Bay* (CVE 62)—VC81 — A joint reunion is scheduled for 4-7 September. For additional information, write to John A. Sassano, Market Town, Route #3, Gainesville, Ga.

• *579th Seabees* — A reunion is scheduled at the Elks Hall, Reno, Nev., on 22 August. For information, write to LCDR Dale C. Ryman, USNR, 110 Alto Loma, Millbrae, Calif.

• *Submarine Veterans of World War II* — All ex-submarine personnel are invited to the second annual convention in Battle Creek, Mich., from 26-28 June. For more details, write to Frank Ruman, 28760 Floral, Roseville, Mich.

• *Pearl Harbor Survivors Association* — A reunion is scheduled for 24-26 July at the Del Webb Towne House, San Francisco, Calif. For more information, write to J. T. Paul, 4836 Shetland Ave., Oakland, Calif. 94605.

• *National Women Marine Association*—The bi-annual convention will be held in St. Louis from 3-6 August. For information, write to Ann Obertots, 1190 Gahan Dr., Florisant, Mo.

• USS *Density* (AM 218) — A reunion is planned for all who served on board. For information, write to L. Bailey, 1513 Bradford Dr., Irving, Texas 75060.



Here Are Changes Recommended for

AFTER MONTHS of studying the effectiveness of various officer programs available to enlisted personnel, a board of 14 officers and enlisted men—headed by VADM T. G. W. Settle, USN (Ret.)—has made some concrete suggestions.

Included in the Settle report was a recommendation that the phasing out of the warrant officer program, which has been underway for several years, be halted as quickly as possible, and that a revised, revitalized warrant program be started.

Other important Settle board recommendations are concerned with changes to the limited duty officer and senior and master chief programs.

The Settle board suggestions have received tentative approval for Navywide application. It appears likely that the warrant officer program is on its way back, and that changes in the LDO and E-8/E-9 programs will be made in the near future. It also appears, after a study of the Settle report, that the suggested changes will be of benefit to the individual officers and enlisted men most affected.

Recommendations

The following discussion of the Settle report may give you an insight on what to expect in the line of changes and how you might be affected.

Who Would Be Eligible for WO?

Here's how it appears the eligibility criteria for appointment to warrant officer (W-1) will stack up when and if a WO program is officially reintroduced. The Settle board recommended that the rate, service and age factors be written as follows:

- *Rate*—CPO (E-7) or PO1 (E-6). During the three-year phase-in of the recommended WO program, senior and master chiefs could also apply. E-6 applicants must pass an appropriate E-7 exam before being selected.
- Service — Six to 12 years' active service at time of application. During phase-in, active service requirement would be six to 20 years, which is more compatible with the service of master and senior chiefs.
- *Age*—23 to 29 years, 23 to 39 during phase-in.

Those who are eligible must pass an officer selection battery test, and technical tests in their respective specialization categories. A selection board makes the final decision.

Following selection, and in accordance with input quotas specified by the Chief of Naval Personnel, W-1s would receive at least 12 weeks at an officer candidate school, followed by appropriate technical training in Navy or civilian schools.

After their reviews of the LDO, warrant and E-8/E-9 programs, the Settle board members agreed that a number of changes were in order. Recommendations and sub-recommendations for each category included these points of obvious first interest:

- The warrant officer program should be revitalized in revised form and phased back in.
- Personnel inputs for the LDO program should be reduced correspondingly with any renewed warrant program, and the sole source of LDOs should eventually be commissioned warrant grades W-2 and W-3.
- Clearcut qualification requirements should be drawn up for master and senior chiefs, and detailing of E-8s and E-9s should be shifted from the enlisted distribution offices to the Bureau of Naval Personnel.

The Settle board did not simply brush off recommendations concerning the status of the warrant officer that had been made in 1959. Reports of the 1959 committees, and the warrant officer phase-out program, were closely scrutinized.

One obvious question was: Why were the warrant programs considered expendable in the first place? A blunder? Not at all. Five years ago it was believed that the warrant officer program, much like many old airplanes and missiles, simply had no place in the modern Navy.

With the advent of the limited duty officer in 1947, the "officer specialist" distinction so long associated with the warrant officer was being duplicated by the LDO ensign—who had more rank. (Ironically, the LDO was an evolutionary outgrowth of the warrant officer.)

When the Navy began selecting men for the "super" chief grades of E-8 and E-9, more of the warrant's specialist duties were infringed upon. By 1959 the warrants were being squeezed from the top by the LDO, and from the bottom by senior and master chiefs.

Earlier Committee Studied WOs and LDOs

In an attempt to remedy this, the Chief of Naval Personnel appointed a special committee of naval officers to study the problems of the warrant program. It soon became clear to the committee that the end of the warrant officer, who was as old as the Navy itself, was inevitable. This, mainly, was the basis for the recommendations and decisions that followed, and the Navy went along with these suggestions:

- Phase the warrant officer program out by normal attrition, and by curtailing input after fiscal 1960.
- Change about one-third of the warrant officer billets to master chief, and the rest to unrestricted line or staff corps.
- Expand the LDO program by increasing the number of categories, and by increasing personnel input.

It was believed that the warrant program would be phased out in a way that would be of benefit to indi-

Warrants, LDOs and Super Chiefs

vidual warrant officers. Simply by closing the program to new applicants, the warrant officer would gradually disappear. By 1975, most warrants would either have retired from the Navy or would have been selected for LDO. None was to be forced out, nor were any career benefits to be lost. (Incidentally, none was, none were.)

There were approximately 5000 warrant officers, W-1 through W-4, on active duty in 1959 when phase-out plans got underway. One warrant officer continued to be relieved by another, if such a relief was available. If not, a qualified master chief or LDO was assigned.

In 1960, a move was made to raise the experience level of junior officers. Approximately 20 per cent of those in warrant grades were selected for LDO or the medical service corps (not to hasten the phaseout, although it did reduce the number of warrant officers).

By July 1961, no appointments to warrant were being made, and the warrant officer was slowly disappearing. The original forecast that all but a few would be gone by 1975 appeared valid.

In July 1962, approximately 75 per cent of those whose names appeared on the warrant roster were eligible for 20-year retirement but, as the Navy had promised, no pressure was put on them to retire. In fact, the warrant officer was encouraged to stick it out for 30, and it was pointed out that it would be advantageous to do so. The W-4, the warrant corps was reminded, receives a pay increase at the completion of 30 years, which of course means a fatter retirement check.

Improvement in warrant officer rotation was made with respect to shorter sea tours and better choice of shore billets. (Warrants began serving in more billets other than those specifically earmarked for WO.)

On the surface, the warrant phase-out appeared to be going smoothly. What's more, the 2000 or so warrant officers who remained on active duty had no complaints about Navy efforts to improve their professional interests.

Findings of the Settle Board

The Settle board found, however, that current and planned needs left much to be desired in the administration of the warrant, LDO, and E-8/E-9 programs. Improvements could and should be made with regard to eligibility requirements, adequacy of designators and advancement of enlisted personnel while serving in a temporary commissioned status. Further, the three programs could have a better effect on retention of men in critically short skills if some changes were made.

Mainly, the Settle board concluded that the warrant phase-out, which was premised upon a functional overlapping of LDOs and senior and master chiefs, was invalid.

The ever-mounting sophistication of ships, aircraft and weapons called for enlisted technicians and commissioned officer specialists with broader and higher qualifications. In other words, what's needed is more warrant officers, not fewer.

Completion of the phasing out, the Settle board believes, would leave a void not effectively filled by LDOs and master chiefs. "The Navy needs now, perhaps more than ever, warrant specialists who can closely supervise complicated machinery and weapons, and the enlisted men who maintain and operate them."

The Settle board sees the new warrant officer as a man who bridges the gap between enlisted and commissioned structures. "He is a specialist who does not have functions overly diluted with collateral generalized duties. He's flexible, however, and grows in level and degree of competency during his progression through the warrant ranks, while remaining in his specialization category. He can be assigned repeatedly to similar billets largely irrespective of his rank within the warrant structure.

"He is not 'promoted out' of billet levels, but continues as an officer-technician-supervisor who remains in his skill and close to his equipment and the enlisted maintenance and operating personnel. This assignment flexibil-

Warrant Officer Assignments

Where would the warrant officer serve?

Where would he eat and sleep?

In answer to the first question, the Settle board thinks the warrant officer of the future should be assigned to any ship or shore command that needs a veteran job field specialist who has the horsepower of an officer.

In past years, warrants were not ordinarily assigned to smaller combatant ship types. Now, many such types, particularly the new members of the destroyer family, have complicated machinery and weapons which could well use the attention of warrant officers. For example, a warrant officer with years of experience and training in the weapons field would be just the man to have in charge of a complicated weapons system and its associated gadgetry.

On board most ships, and at most shore commands, separate warrant officer berthing and messing facilities have disappeared. This, the Settle board believes, is just fine.

Warrant officers should eat and sleep in the same wardroom facilities available to other officers. Messing warrants in wardrooms, and berthing them in wardroom country, would be economically sound, and would add to the warrant's prestige and the unity of the officer corps.

Warrants, LDOs and Chiefs (cont.)

ity is an advantage inherent in a revitalized warrant program."

Recommended: New WO Program

The Settle board believes a new warrant program, as suggested, would keep the WO in just such a status, and would further constitute a career goal for enlisted men who aspire to officer status, but not a commission. "A renewed warrant program would increase retention of enlisted men, including many in the critical shortage ratings."

The board also thinks a revitalized warrant program would "provide a pool of younger specialist officers who would not drift out of close supervision by generalization or promotion, and to which high selection criteria can be applied for promotion within the warrant ranks and from warrant to limited duty officer."

As suggested, the revised warrant program would be phased back in during fiscal 1966, 1967 and 1968. Applications would be solicited during fiscal 1965 (beginning next July), and first new appointments would be made in fiscal 1966.

During the three-year phase-in, all three CPO grades and PO1s would be eligible for warrant application. Beginning in fiscal 1969, only PO1s and chiefs (E-7) could apply for warrant officer. Appropriate age and time-in-service factors would apply for both periods (see box, p. 30).

All new warrant appointments would be temporary (W-1), with opportunity to apply for permanent appointment after three years. After two years as a W-1, the warrant officer would be eligible for promotion to W-2. (E-8 and E-9 personnel appointed during the three-year phase-in would be required to serve only one year as W-1 before becoming eligible to move up to W-2.)

W-2s and W-3s would serve four years in their respective grades before becoming eligible for promotion.

Before implementing any revitalized warrant program, the Settle board thinks all warrant billets should be identified by specialization category and eased into allowances and complements, replacing corresponding numbers of LDO billets.

Sufficient "generalized" warrant billets should be included to promote good sea-shore rotation.

Qualification requirements for warrant appointment and promotion should be reviewed with emphasis on potential for future service.

For assignments, a warrant officer assignment section would be re-established within BuPers.

Since the medical and dental organizations have direct enlisted-to-Medical Service Corps channels, medical and dental warrant categories would not be required.

LDO Program

The Settle board's view of the LDO program was that it should be unchanged for the most part, but it made these recommendations.

Revised Specialization Groups

Here's a listing of the warrant officer and LDO specialization categories proposed by the Settle board. New categories are indicated by an asterisk.

Warrant Officer	Limited Duty Officer
Boatswain	Deck
Ship's Control Technician*	Operations
Operations Technician	
Surface Ordnance Technician	Surface Ordnance
Ordnance Control Technician	Ordnance Control
Underwater Ordnance Technician	Underwater Ordnance
Ship's Clerk	Administration
Communications Technician	Cryptology
Machinist	Engineering
Precision Instrument Technician*	
Ship Repair Technician	Hull
Electronics Technician	Electronics
Electrician	Electrician
Bandmaster	Bandmaster
Aviation Control Technician*	Aviation Operations
Aviation Boatswain*	
Aviation Ordnance Technician	Aviation Ordnance
Aviation Maintenance Technician	Aviation Maintenance
Aviation Electronics Technician	Avionics
Aviation Equipment Technician	Aviation Equipment
Meteorologist	Meteorology
Photographer	Photography
Supply Clerk	Supply LDO
CEC Warrant	CEC LDO

- It was recommended that Waves be permitted to seek LDO appointments. This would require authorization by Congress, since the LDO program, as written, is open to male enlisted personnel only.
- It was recommended that certain LDO specialization categories be identified, and that BuPers specify which line, supply, and civil engineer corps billets could be filled alternatively by LDOs with new code numbers after their primary designators.
- It was further recommended that there be no LDO inputs during fiscal 1966 and 1967, in view of other suggestions. Then, beginning with fiscal 1968, the sole source into the LDO program would be from CWO ranks W-2 and W-3. In other words, *the program would have the enlisted man serve as a warrant officer before he goes on to LDO.*

Before going into the whys and wherefores of Settle board LDO recommendations, it may be interesting to check the who's and what's of LDO in the first place. Over the years, the LDO program has been a principal Navy enlisted to officer channel. It has given the man in the Fleet an opportunity for an appointment as an LDO while providing him with the chance to continue working in the broad technical field related to his rating.

As already noted, the LDO program is an evolutionary outgrowth of the warrant officer program, made necessary by the constant increase in technological and operational developments since the beginning of World

War II. By the end of the war, it had become apparent that a new category of officer, with special talents gained as an enlisted man, was needed to supervise certain technical areas.

Admiral Sprague, then Chief of Naval Personnel, summed up the situation before a Congressional committee considering a bill that was to become the Officer Personnel Act of 1947. He testified that "one of the outstanding features of this bill is the creation of a new category known as LDO. This will be restricted to the enlisted men and warrant officers who have established outstanding records.

"Under the bill, these men would be assured the opportunity for a reasonable career as officers while, at the same time, enabling the Navy to use their specialized skills and practical knowledge. They will not be required to compete with the general line officer, who has always had the advantage of youth and, perhaps, a formal education.

"For many years, opportunity has existed for enlisted men to attain commissioned rank without attending the Naval Academy. In doing so, they have been at a disadvantage in competing with the general line officer of broader qualifications.

"The establishment of LDO is a definite step forward, both in recognition of outstanding enlisted men and in the benefits that will result to the service."

The bill was passed in 1947, and the limited duty officer became a part of the Navy.

As time passed, considerable differences of opinion concerning the LDO's status resulted in widespread confusion. Many believed that LDOs were really warrant officers with solid stripes on their sleeves.

As a result, a board was convened to study the LDO and warrant officer titles, classifications, technical fields and normal paths of advancement. It was recommended that a qualifications manual for warrant officers be published, and that a similar manual be originated for LDOs.

LDO and Warrant

The warrant officer manual was published in November 1956, and the LDO manual appeared in mid-1958. The manuals contained occupational information and qualifications, requirements, and professional areas of responsibility for each category and grade.

Perhaps the most interesting definitions concerned the titles themselves.

The role of the warrant officer is that of "technical specialist, over several warrant officer areas.

The LDO is a "supervisory specialist in the specific technical area represented by his category."

In other words, a chief petty officer is responsible for one technical area. The supervising warrant officer is the technical specialist who's responsible for several CPO areas. The LDO is responsible, as a supervisory specialist, over several wararnt officer areas.

Over the years, numerous changes to these and other quals manuals have been published to keep in step with technological advances and operational developments in the Navy.

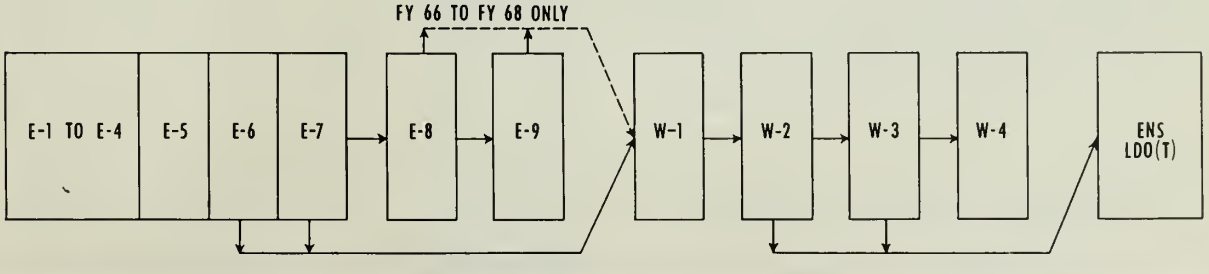
Qualifications and requirements cannot remain static. They must, and do, reflect the changes within the naval establishment. Changes are inevitable, when situations warrant, even if changing back to something that's worked in the past is for the all-inclusive best interests. This is the principle the Settle board followed when studying the LDO program.

The LDO program, concluded the Settle board, is a good one. It provides the Navy with junior officers needed to fill the base of the commissioned officer pyramid in numbers not obtainable from other sources. The LDO brings into the officer ranks the training and experience he gained in specialized fields during enlisted and warrant service. He is mature, but ordinarily has less educational background than his college graduate colleague. Nevertheless, he performs his duties with high proficiency.

But, says the Settle board, have the enlisted man serve as a warrant officer before he goes on to LDO. This will give him some valuable training and experience as an officer before he receives an LDO appointment. Thus, the W-2s and W-3s of the planned revised warrant program make up the sole recommended source for LDO inputs.

Paths of Advancement — Enlisted to Warrant to LDO

This is how the Settle board's proposed route of progression from enlisted to warrant officer and LDO appears in a graphic presentation. The accompanying article contains details concerning a three year phase-in period, during which senior and master chiefs would be eligible for warrant grades.



E-8s and E-9s Would Benefit Too

It would be logical and advisable, believes the board, to provide the LDO enlisted - to - officer channel for Waves, who are presently excluded by law. Seek authorization from Congress, suggests the board.

In the course of its deliberations, the Settle board considered the use of appropriate specialization category insignia for the LDO, such as those worn by warrant officers. Whether this would better serve broad Navy interests was debated. It would certainly associate the LDO more closely with his specialization category but, in turn, might hamper any attempt to generalize. It was concluded that line LDOs should continue to wear the traditional star insignia, rather than some specialization category device.

Senior and Master Chiefs

Where do the senior and master chiefs fit into all this? Obviously, not where they should, it was agreed. As things stand now, the E-8 and E-9 grades are merely two higher pay levels in the CPO rate that don't involve broader and higher competence, responsibility and authority.

Senior and master chiefs have been used largely interchangeably with E-7s, resulting in damage to the professional prestige of the E-7, and professional frustration for the E-8 and E-9.

The old plan to have master chiefs take over functions of some of the phasing out warrants just didn't work. No matter how technically qualified the E-9 has been, he's been faced with legal limitations on his "signature" and accountability authority. This has hampered his effectiveness, the board found, and the master chief agrees.

Lack of specific technical qualification requirements, by specialization category, has also caused much frustration. Billets have been put into allowances and complements, and strengths have been built up, but mainly to meet authorized ceilings rather than to meet identified actual needs for higher-than-CPO qualifications.

What to do? Identify the super chief, and then use him, as a bona fide higher ranking man above E-7, without overlapping the functional responsibilities of warrants and chiefs. The demarcations between chief and senior chief, and between senior and master chief, should be made actual rather than mere pay fogies, as the board put it.

"Senior and master chiefs should be built up in level and scope of responsibility and authority, to constitute bona fide higher rates at the top of the enlisted structure; and to constitute a better career goal for high caliber first-cruise men, thereby augmenting their retention," the report said.

Draw up qualification requirements, says the board, by specialization categories, for master and senior chiefs, and get them into use as soon as possible. Identify senior and master chief billets by specialization categories, based on actual needs for these rates, rather than to fill authorized ceilings. But, include sufficient generalized shore billets to promote reasonable and fair sea-shore rotation.

Shift the detailing of senior and master chiefs from the EPDOs to BuPers early in fiscal 1965. Handle detailing much as you would an officer's.

Set yearly advancement quotas to E-8 and E-9 with a view toward maintaining identified billet needs. Revise the level and scope of E-8 and E-9 advancement exams so that they match the qualification requirements developed for specialization categories.

Do some specialization compression, the board added, and E-8 is the place to start. The number of specialized ratings and categories should be compressed progressively up the promotion ladder, senior chief to LDO.

In the course of their studies, the Settle board members reviewed other enlisted-to-commissioned programs, and had some brief comments on each.

Other Programs

- *Integration*—A good program which provides an enlisted to officer channel for small numbers of high caliber personnel who are officer material and desire commissioned careers, but for whom other channels are not available or not desired. Continue it in its present form.
- *NESEP*—An excellent program which should be carried on in its present form.
- *NavCad*—The enlisted component of the NavCad input constitutes a needed enlisted to officer channel. Continue it in its present form.
- *Enlisted to Medical Service*—This channel for those in the HM and DT ratings, direct to Medical Service Corps commissions, serves its purpose well. Continue it in its present form.
- *Enlisted to Naval Academy*—An excellent channel for the limited number of enlisted men who apply and qualify. Continue it in its present form, but increase input quotas if possible.

As yet no specific information is available concerning the number of warrant officers and LDOs that would evolve if the Settle board recommendations are adopted. Such numbers would be based on Navy needs, as determined by billet identification.

One final point to keep in mind. All these Settle board proposals are still just proposals, even though tentative approval has been given. Details for implementation are being worked out by cognizant BuPers offices. It's possible that Congressional action may be required before some phases of the proposed programs could be adopted.

The official support received to date makes the adoption of the Settle board recommendations highly likely. Then, before too much time passes, the 2000 or so warrant officers still on active duty will have plenty of company, and those of us who are somewhat nostalgic can fall in, render a snappy salute, and voice a hearty "Welcome back, sir."

—Dan Kasperick, JO1, USN

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

New FBM Sub Tender Launched

The first ship in a new class of submarine tenders has been launched at Bremerton, Wash., and is scheduled to be commissioned later this year.

The new ship is *Simon Lake* (AS 33), specially constructed to support fleet ballistic missile submarines.

She is larger than USS *Hunley* (AS 31) and *Holland* (AS 32), the first tenders in history built from the keel up to service and maintain *Polaris* missile SSBNs. (These three are the only sub tenders built by the U. S. since World War II. In addition to servicing and maintaining SSBNs, the new tenders are capable of making any sub repair short of a major overhaul.)

The new AS is 642 feet in length, displaces 21,450 tons (full load displacement), and will be manned by 1387 officers and enlisted men.

Hunley and *Holland* measure 43 feet less, displace 2450 fewer tons, and carry approximately 400 fewer men.

The addition of *Simon Lake* will boost to 10 the number of sub tenders in commissioned service. In addition to *Hunley* and *Holland*, seven AS types are now on the job.

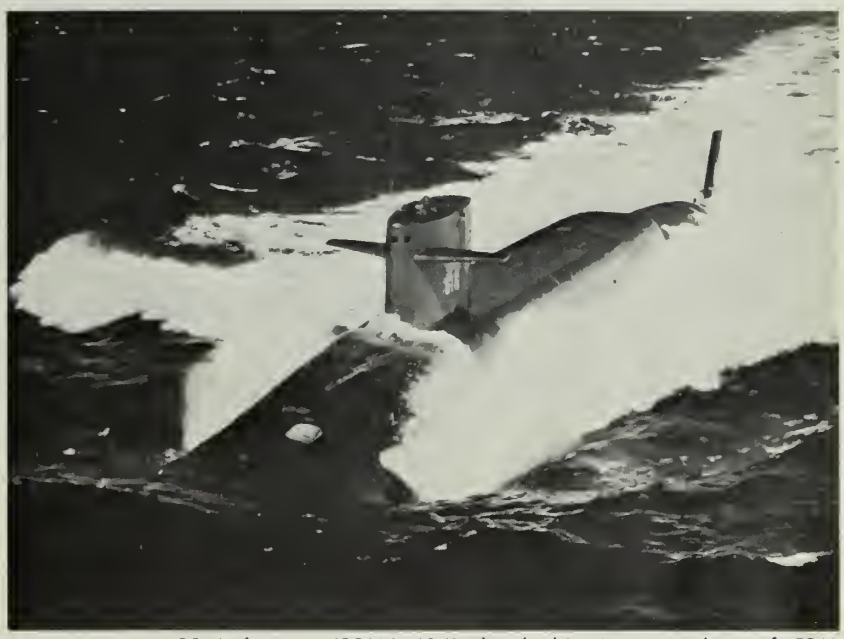
Six of these are of the World War II *Fulton* class. The six *Fultons*, which are 530 feet in length and displace 16,000 tons (full load), are *Fulton* (AS 11), *Sperry* (AS 12), *Bushnell* (AS 15), *Howard W. Gilmore* (AS 16), *Nereus* (AS 17) and *Orion* (AS 18).

The remaining tender is USS *Proteus* (AS 19), originally a *Fulton* class ship that now serves as an SSBN support ship, having been extended 44 feet in length and fitted with nuclear sub and *Polaris* missile sub support capability.

Two of the nine sub tenders now in commission, *Sperry* and *Nereus*, are assigned to the Pacific Fleet. The remaining seven work in the Atlantic.

Simon Lake, when commissioned, will be assigned to the Atlantic with her home port at Charleston, S. C.

The new tender's name was selected in honor of a pioneer submarine developer who produced U. S. Navy subs in the early 1900s, and who, until his death in June 1945, served as a World War II Navy advisor.



UNDERWAY—*USS Lafayette* (SSBN 616), lead ship in new class of FBM subs, and equipped to fire *Polaris A-3* missiles, cruises in Atlantic.

No Limit to Those Subs

Three *Thresher* class submarines, USS *Flasher* (SSN 613), *Greenling* (SSN 614) and *Gato* (SSN 615) will be lengthened by 13 feet, nine inches to make room for increased equipment and provide greater habitability for the crew.

Flasher, *Greenling* and *Gato* are the only three submarines of the *Thresher* class scheduled to be lengthened, because they have heavier sails and propulsion plants than their sister ships. Other changes, including those specified by the submarine safety program have also added weight to the three ships.

The additional length gives the three ships sufficient buoyancy margin to allow for the installation of equipment yet to be developed.

The three subs scheduled for lengthening will be cut transversely through the center of the hull, where the new section will be inserted. This is the same method used in the past to lengthen other subs.

YESTERDAY'S NAVY



On 3 Apr 1942 FADM C. W. Nimitz, USN, was named Commander In Chief Pacific Ocean Areas. On 10 Apr 1942 the Pacific Fleet was reorganized into type commands. On 18 Apr 1942 submarine bases at Kodiak and Dutch Harbor, Alaska, were established. On 15 Apr 1944 the Alaskan Sep Frontier and 17th Naval District were established. On 21 Apr 1944 a U. S. task force attacked enemy defensive positions and enemy airfields in New Guinea. On 27 Apr 1941 the Americans, Dutch and British reached agreement on combined operating plans of defense forces in the event of war with Japan.

VADM Semmes Is New Chief of Naval Personnel

Vice Admiral Benedict J. Semmes, Jr., has assumed his duties as the new Chief of Naval Personnel. Vice Admiral William R. Smedberg, III, who completed his four-year tour as bureau chief in February, retired as of 1 April. In the interim, RADM A. S. Heyward, Jr., has been serving as Acting Chief of Naval Personnel.

Admiral Semmes is a graduate of the Naval Academy and the National War College, and a veteran of three decades of naval service, ranging through World War II and the Korean conflict. His last duties were as Commander Cruiser-Destroyer Force, U. S. Atlantic Fleet.



VADM Benedict J. Semmes, Jr., USN

After receiving his commission in 1934, Admiral Semmes reported aboard the battleship USS *Mississippi* (BB 41), where he served until ordered to the Staff of Commander, Battle Force. He was transferred to USS *Wasp* (CV 7) early in 1940.

Admiral Semmes' duty on *Wasp* continued until September 1942, when the carrier was torpedoed by a Japanese submarine in the Coral Sea. After his rescue he reported for duty as executive officer of USS *Sigsbee* (DD 502), and participated in raids on Marcus and Wake Islands and in the assault of Tarawa.

He received his first command, USS *Picking* (DD 685), in the summer of 1944. While in command of *Picking*, operating in Pacific waters, he was awarded the Navy Cross and the Bronze Star Medal with Combat "V."

After the surrender of the Japanese, Admiral Semmes commanded the destroyer USS *Ault* (DD 698); Destroyer Division 302 in the Western Pacific during the Korean hostilities; USS *Shenandoah* (AD 26); and Destroyer Flotilla Three.

In 1958 Captain Semmes graduated from the National War College and received his promotion to rear admiral. In 1962 he reported for duty as Commander, Middle East Force, in the Indian Ocean and Persian Gulf area, where he served until he received orders for duty as Commander Cruiser-Destroyer Force, Atlantic Fleet.

Vice Admiral Smedberg completed a tour as Chief of Naval Personnel which began in February 1960. Admiral Smedberg's career has included duty as Commander Cruiser-Destroyer Force, U. S. Pacific Fleet; Commander Second Fleet; Commander Striking Fleet Atlantic; and Superintendent of the U. S. Naval Academy.

Nominated for the rank of Vice Admiral, Admiral Heyward has been selected to relieve VADM Fitzhugh Lee as Chief of Naval Air Training at Pensacola, Fla., in June.

Turntable for GCA

A newly installed hydraulic turntable at NAS Willow Grove has greatly speeded up the process of changing runways with Ground Controlled Approach equipment.

GCA equipment is used to guide pilots on an instrument landing when visibility is not good enough to allow for a visual landing. In effect, the pilot follows a beam sent out by GCA.

When GCA is in use and the landing pattern is changed from one runway to another because of wind or other conditions, the GCA equipment must be revolved accordingly. Usually this equipment is housed in trailer vans, and a change of position requires that the vans be towed to the new spot.

At Willow Grove the trailers have been placed on a platform which resembles a grease rack in a service station. This large platform, which has a lift capacity of 80,000 pounds, was built as a GCA turntable prototype.

To change runways now, the platform is lifted hydraulically, rotated electrically to the proper position for use on a different runway, then set back down.

The time for shifting runways with GCA equipment has been cut to four and a half minutes.

PacFlt Subs Are Hot Shots

For the past three years, submarines in each division of the Pacific Fleet have competed semiannually to test their excellence in fire control and torpedo performance.

This year, 11 submarines were judged to be top gunners—six of them based at Pearl Harbor and the remaining five at San Diego.

Pearl Harbor subs riding tall in the saddle are USS *Halibut* (SSGN 587), *Medregal* (SS 480), *Barbel* (SS 580) for the third time in succession; *Swordfish* (SSN 579) for the second time running; *Blackfin* (SS 322) and *Wahoo* (SS 565).

The San Diego-based sharpshooting subs are USS *Permit* (SSN 594), *Sea Fox* (SS 402), *Spinax* (SS 489), *Diodon* (SS 349) for the second time; and *Rasher* (AGSS 269).

The top gun awards are not connected with the Navy-wide "E" awards which are made annually.

Squadron Has One for Record

Whether a cake was baked is not a matter of record. There was, however, ample cause for celebration when Corpus Christi's Training Squadron 28 completed 365 accident-free days.

One way, of course, to spend a year without accidents is to do nothing. TRARON 28, however, doesn't fall into this category. All told, it logged 30,363 flight hours. Broken down into more easily digested statistics, this means that three planes could have flown 24 hours a day for an entire year and still had hours to spare.

The squadron made 11,224 training flights and 73,728 landings during the year. More than 22,000 of the landings were mirror field carrier landings and about three thousand were actually made on carriers.

Lest anyone neglect to give due credit to the squadron's maintenance crew, it might be noted here that TRARON 28 pilots have flown 113,495 hours since May 1960 without ac-





OFFICER STUDENTS at the Atlantic Fleet Destroyer School, Newport, R. I., *(left)* conduct simulated anti-air warfare exercise in CIC mockup, and *(right)* are taught proper procedures to be followed when overhauling main feed pumps.

cident caused by faulty maintenance.

During their accident-free year, TRARON 28 trained prospective U. S. naval aviators in multi-engine instrument procedure and indoctrinated them in the antisubmarine warfare mission of the Navy.

The squadron also flew 697 hours with 1280 NROTC midshipmen, giving them indoctrination flights in TS2A *Trackers*. They also trained seven flight students from other countries, plus 12 Reserve commanders and active duty pilots who were given two-week refresher training courses.

The squadron's officers average more than 2500 flight hours per man. They came to the squadron with varied aviation backgrounds—fighter and attack pilots, ASW types, land and sea patrol, early warning, transport and helicopter fliers.

The instructors receive their students after they have completed about 160 hours of basic training at Pensacola. After 18 to 20 weeks of heavy training with TRARON 28, the students are designated naval aviators.

McKinley Returns to Pacific

USS *Mount McKinley* (AGC 7), which claims to be the Navy's oldest commissioned amphibious command ship, is scheduled to return to the Pacific Fleet this year. The ship, which was converted from ss *Cyclone* in 1944, saw action in the Pacific during World War II and the Korean conflict.

After her commissioning the command ship sailed to the Pacific theatre, where she took part in the assaults on the Palau Islands, and Leyte, Mindoro and San Narciso, in the Philippines. When the war ended she entered the port of Sasebo, Japan, to accept the surrender of that Japanese stronghold.

Between World War II and the Korean conflict she operated in the Pacific and was present during the atomic tests at Bikini and Eniwetok.

During the Korean conflict she served as General of the Army Douglas MacArthur's flagship for the landing of United Nations forces at Inchon and later took part in the Wonsan landing.

Mount McKinley joined the Atlantic Fleet in 1956 and made several Mediterranean cruises while operating as flagship for the Sixth Fleet Amphibious Striking Force. In 1962 she was the amphibious command ship during a demonstration for the late President Kennedy.



Arleigh Burke Fleet Trophy

Burke Trophy Winners

An Atlantic Fleet *Guppy* type submarine, and a Pacific air patrol squadron, have been awarded the Arleigh Burke Fleet Trophy for 1963.

USS *Tirante* (SS 420), based at Key West, and VP 22, which operates out of Pearl Harbor, received the Burke award for having achieved the greatest improvement in battle efficiency, based on year-long, Fleet-wide competition.

Tirante was commanded by LCDR Wallace A. Greene during the period on which the award was based. CDR John L. Kauth, Jr., commanded VP 22.

ADM Arleigh A. Burke (Ret.), the man for whom the award is named, served more than 38 years on active duty, including service as Chief of Naval Operations from 1955 to 1961. The Burke Trophy is awarded each year to one ship or aircraft squadron in the two fleets.



DRILLING ON FLATTOP — The ASW aircraft carrier *USS Intrepid* (CVS 11) holds fire drill starboard side aft on flight deck. Centered in background, communication antennas, mounted on a monopole which can be raised and lowered.

Essex Cruises Eastward

While icy winds were blowing in their home port of Quonset Point, R. I., the 2700 officers and men of uss *Essex* (CVS 9) were combining business with pleasure in the Mediterranean and Arabian Seas, where the weather was noticeably warmer.

Essex's first port-of-call was Barcelona, Spain. During four days ashore, *Essex*men enjoyed bullfights and sightseeing tours of the city. Some spent their liberty hours repairing a Spanish orphanage.

After leaving Barcelona *Essex* steamed to Sicily, where final plans were made with unit commanders of the Sixth Fleet for Mediterranean ASW exercises. During the exercises, *Essex*men were on duty for long hours. Nevertheless, they were able to enjoy the warm Mediterranean sun during breaks.

During her sojourn in the Med *Essex* called at Malta, where her men were treated royally by the men of the Royal Navy Air Station at Halfar.

From Malta, *Essex* steamed toward Suez, where she made her fourth transit of the Suez Canal from Port Said. *Essex*men lined the flight deck to watch camel caravans and goat herds pass only a few hundred yards from the ship.

Some 12 hours later the big carrier entered the Gulf of Suez. Two more days brought her to Jidda, the capital of Saudi Arabia.

Jidda was an important stop for *Essex*. While anchored there, she was visited by more than 200 Saudi Arabian government officials (including two princes of the Royal house), businessmen and members of the diplomatic community.

While on board, the guests were given a demonstration of the carrier's antisubmarine capability.

Essex demonstrated the slim chance a submarine would have against her, as her rockets, bombs and depth charges shattered the calm of the Red Sea and *Essex* planes made low-level attacks on the simulated target.

The demonstration ended as the destroyers of DESRON 24 steamed by in close formation firing their ASW weapons.

After leaving Jidda, the next stop for *Essex* was the British protectorate of Aden, where the big ship was refueled. Aden is one of the bargain centers of the world, and *Essex*men staggered back to the ship laden with camel saddles, water pipes and other oriental impedimenta, while the camera fans spent their liberty hours taking pictures of Aden's veiled women, snake charmers and camel drivers.

When *Essex's* fuel tanks were topped off, she set her course for Karachi, Pakistan, to take part in the Central Treaty Organization naval exercise Midlink VI.

Naval forces from Pakistan, Iran, Turkey and the United Kingdom took part with the United States forces in Midlink.

During the exercises, *Essex*men and the crew of the British *HMS Ark Royal* worked closely together.

The crews of *Essex* and *Ark Royal* combined their efforts to produce a flight deck variety show when Midlink was completed.

Essex retraced her course to the United States via the Suez Canal and the Mediterranean, where she plowed through heavy seas to Naples. While there, *Essex*men were treated to special tours of Rome, Pompeii and Capri. Some did a good deed by painting and making general repairs on a shelter for homeless children.

After leaving Naples, *Essex* engaged in a brief ASW exercise before passing through the Straits of Gibraltar for her trip back to the winter winds of Quonset Point.

Seabees Learn to Get Tough

The men of Mobile Construction Battalion Four have been emphasizing the fighting part of the fighting Seabees.

While deployed at the U. S. Naval Base at Argentia, Newfoundland, the construction men brushed up on the theory and practice of firing the M60 machine gun, .45-caliber pistol, the 3.5 rocket launcher, the 81-mm mortar, hand and rifle grenades, the 106 recoilless rifle and M14 rifle.

The students received instruction in moral and military leadership, atomic, chemical and biological warfare, map reading, scouting and patrolling, phases of offensive combat, tactical troop leading, techniques of rifle fire and advanced first aid.

In addition, the Seabees took advanced courses in military operations and tactics.

After class, the students took to the field, where classroom theory was applied to compass courses, attacking fortified positions, troop movement to contact point and other combat skills.

As has often been the case during their history, the Seabees never know when they will have to lay aside their shovels and pick up their weapons as front-line fighting units.

Pulaski Is Launched

The 28th Fleet Ballistic Missile submarine slid down the ways at Groton, Conn., on 1 February. *Casimir Pulaski* (SSBN 633) is named in honor of Brigadier General Pulaski, who commanded troops at the battles of Brandywine and Germantown during the American Revolutionary War.

There are 13 more *Polaris* subs either building or authorized.

New AZ School Opens

Classroom training in one of the newest enlisted rating specialties is underway at NAS Memphis, Tenn.

The formal opening of class "A" school for prospective holders of the new Aviation Maintenance Administrationman (AZ) rating, which is now being introduced into the enlisted structure, was held at the Naval Air Technical Training Center on 6 Jan 1964.

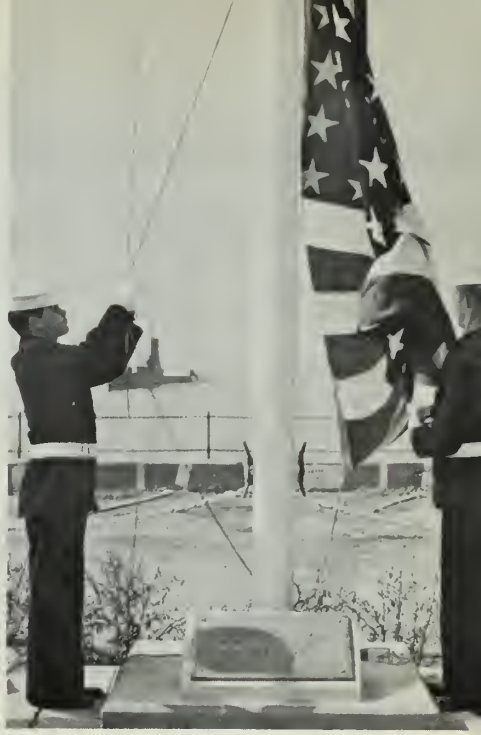
The curriculum for the six-week course includes typing, familiarization with various aircraft publications, logs, records and maintenance systems, aircraft accounting, and general maintenance and administrative procedures peculiar to aircraft and naval aviation.

Thetis Bay Decommissioned

The Navy's first assault helicopter aircraft carrier, USS *Thetis Bay*, has begun joining the mothball fleet in Philadelphia. The ship, which has held the designations CVE 90, CVHA 1 and LPH 6, was the sole survivor of 50 *Casablanca* class baby flattops built as emergency ships during World War II.

Thetis Bay was commissioned in 1944 as CVE 90, and took part in operations at Tulagi, Finschhafen and Iwo Jima. When the war ended she crossed the Pacific 20 times while ferrying troops and equipment from their overseas bases to the United States. Returning from her last ferry trip in 1947, she sailed into Tacoma, Wash., for deactivation.

Eight years passed between her decommissioning in Tacoma and her conversion to the Navy's first assault helo carrier in San Francisco. The conversion began in 1955. Her catapults, arresting gear and centerline elevators were considered extra weight and removed. A new 18-ton elevator was installed near her fantail. In July 1956 *Thetis Bay*, recommissioned CVHA 1, joined the Fleet.



UP IN MORNING — Destroyermen hoist national ensign on flagpole at the Des-Sub Piers, Norfolk, Va.

Thetis Bay had been converted to a helo carrier to test out a new principle in amphibious warfare—vertical envelopment. Vertical envelopment operations, experts believed, would allow for a greater dispersion of amphibious support ships and decreased vulnerability to nuclear attack. Also, helicopters were capable of landing troops behind enemy lines.

The new tactics were soon tried and proven from the decks of the converted jeep carrier. Returning home in 1960, after a WesPac cruise, *Thetis Bay* was redesignated an amphibious assault ship, LPH 6. Although she had been the first helo carrier, LPH numbers one through five had been assigned to other amphibious aircraft carriers

LPH number one was to have been USS *Block Island*, but the conversion was canceled. *Iwo Jima*, LPH number two, was built as an amphibious carrier from the keel up, as was LPH 3, *Okinawa*. Conversions of *Boxer* and *Princeton* made numbers four and five.

Thetis Bay continued to operate until January 1964, when she made her last short cruise, from Norfolk to Philadelphia where she will join the inactive fleet.



THE AMPHIBIOUS assault ship *USS Thetis Bay* (LPH 6), shown in Panama Canal, has joined the U. S. Atlantic Reserve Fleet in Philadelphia, Pa.



RADAR PICKET destroyer *USS Charles P. Cecil* (DDR 835), with almost 19 years of service, adds to underway time during Caribbean cruise.

Replenishment Anchorages

Replenishment anchorages for two new *Polaris* submarine squadrons will be at Charleston, S. C., and Melville, R. I. The 15 subs which will constitute the new squadrons are now under construction.

Both anchorages will be similar to the one now in use at Holy Loch, Scotland, and will include a *Polaris* submarine tender and a floating drydock. Minor support craft will also be assigned to the Melville site.

The eight units of Submarine Squadron 18 will begin to use the Charleston anchorage about August, 1965. Submarine Squadron 20, consisting of seven *Polaris* subs, will begin to arrive in Melville in April 1966.

Support facilities at Charleston and New London, Conn., are being expanded to care for the needs of the off-duty submariners and their families.

And Now, All Is Well

It's not easy to drill 400 feet through marble, but a group of Seabees did it in Vietnam, to provide water in an area where the supply was not adequate.

A Marine unit, stationed at a helicopter base in Da Nang, had a water shortage because their shallow well kept going dry.

A 20-man detachment from MCB-9 moved in with a drill rig and other equipment and turned to. Everything was easy down to 67 feet. Then the drill hit granite and marble.

At 87 feet it was solid marble. Six diamond-tipped drill bits and a few weeks later the drill was 403 feet down and still in marble, but the drilling was a success.

The well is fed by water-bearing fissures in the marble walls. And, at 403 feet, it is reportedly the deepest well in Vietnam.

Jet-Powered Catapult

The Navy is experimenting with a jet-powered catapult to launch Marine Corps aircraft from short, tactical land bases.

The catapult, called the CE-2, is being tested at Naval Air Test Facility, Lakehurst, N. J., for the Short Airfield for Tactical Support Program (SATS).

The CE-2 operates somewhat like shipboard catapult systems, except that a jet-powered turbine instead of steam pressure is used for power.

In operation, the aircraft nosewheel rests on a shuttle and the aircraft is connected to the shuttle by a bridle. An aircraft holdback, similar to those used in shipboard launchings, is also attached.

Power is supplied by the exhaust of a J79-8 turbojet engine, which turns a turbine, which is in turn attached to a capstan which rotates the launching cable.

Before launch, the turbine is locked with a brake. On launch, the brake is released, the jet engine's throttle advanced to the required setting, the holdback breaks and the aircraft accelerates and takes off.

In the event of a wind change, the takeoff direction can be reversed by attaching the shuttle to the return cable at the terminal end.

The SATS Program requires a launching system that is trackless, lightweight, quickly installed and easy to transport to tactical landing areas. The CE-2 tests are being performed to determine if this catapult can meet those requirements.

Cost Cutting at San Pedro

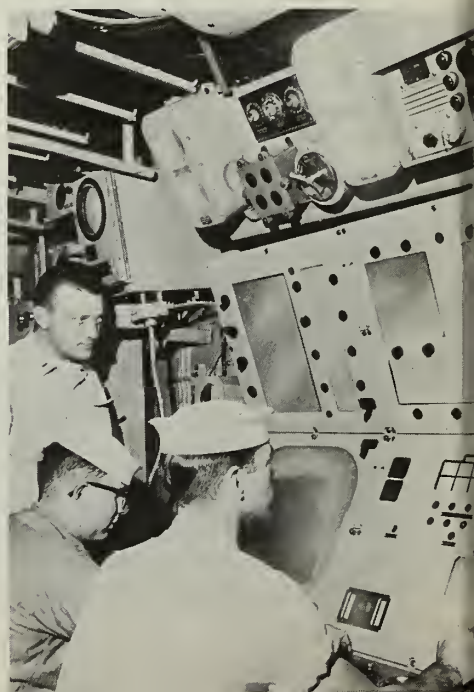
Cost cutting isn't new to the Navy and neither is administration designed to get the most for dollars spent. Nonetheless, economy at the U. S. Navy Fuel Depot at San Pedro, Calif. is an example of what can be and is being done. Here are some specific examples:

- The depot's use of bulk storage and service facilities were improved so drastically that $200,000 could be lopped from its annual budget for alternative storage facilities.
- A pipeline was planned to bring petroleum products from the Los Angeles/San Pedro area to the Miramar Naval Air Station and the San Diego Naval Supply Center.

The pipeline transportation was $100,000 cheaper per year than the old transportation methods.

- Another pipeline delivery system for jet fuel to NAAS, El Centro also saved the Navy about $1000

PACFLT DESTROYERMEN are engaged in on-the-job training in operation of *Asroc* fire control system.





STEAMED UP — S. Stokes, AA, of VT-2 at NAAS Whiting Field, Milton, Fla., operates new steam-cleaning system used on exterior of planes.

per month in transportation costs.

• Personnel requirements were reduced to save another $100,000 on the annual budget. Also, personnelwise, the U. S. Pacific Fleet Petroleum School was transferred from Pearl Harbor to San Pedro so students could use the school to better advantage, thus saving the Pacific Fleet some money.

Altogether, the savings added up to about $400,000 a year and, as the feller said, "Every little bit helps."

Night Rescue

In the darkness and flurry of activity no one saw Airman Carleton Ingerson blown overboard. The night sky was alive with roaring jet fighters which were being hurled into the air as USS *Saratoga* (CVA 60), under a good head of steam, cruised 35 miles off the Florida coast. Aircrewmen were busy on *Sara's* flight deck, each man making his contribution to the night flight operation.

A few minutes earlier Ingerson had been standing ready for the next plane to approach the waist cats. As a catapult spotter, he would then direct the plane to the proper position for launch. But he never directed that next plane.

Another plane, a *Crusader*, was being directed to the forward cats, and as it swung toward the bow Ingerson was caught in the jet blast and was blown off the flight deck. He plummeted 80 feet into the drink.

It was not long before one of his shipmates noticed that Ingerson was missing and reported it immediately. A call went out for Ingerson and when he failed to answer up the CO proceeded on the assumption that he had gone overboard.

CAPT John Lacouture, USN, in command of *Saratoga*, dispatched USS *MacDonough* (DLG 8) to the probable area where Ingerson would have gone over. *Saratoga* recovered the aircraft she had launched and reversed course also, along with USS *Sellers* (DDG 11), the other plane guard.

Meanwhile *MacDonough*, faced with the seemingly impossible task of recovering a man who had no means by which to signal, played powerful searchlights over the water in hopes that one of the crew might spot a head bobbing in the seas.

Impossible though it may seem, it was only a short time afterwards that Dennis M. Adams, SM2, spotted something in the water and alerted *MacDonough's* bridge. As *Saratoga* approached the area, *MacDonough* radioed "We have your man in the water . . . swimming strongly."

Mac launched a motor whaleboat and picked up Ingerson. One hour and 25 minutes after taking an 80-foot plunge from the carrier flight deck Ingerson was safe back aboard ship, none the worse except for a few minor cuts and bruises.

Crew 12 Has Done It Again

The "Outstanding Crew" award presented every six months to the Barrier Force Pacific flight crew evaluated as tops in its field has gone to Crew 12 of the Barrier's Airborne Early Warning Squadron for the third consecutive time.

Competing with other BarPac units, Crew 12 was evaluated on radar and communications effectiveness, general Barrier performance, electronic countermeasures, navigator's charts and records, conduct of crew members, and operational readiness and standardization inspections.

The latest award covered the period 1 Jul to 31 Dec 1963. It was accepted by CDR L. C. Schmidt, commander of the 21 man crew. RADM C. H. Duerfeldt, commander of BarPac, presented the award.

FUEL PUMPER — The oiler USS *Canisteo* (AO 99) arrives at rendezvous point in Atlantic to refuel a destroyer shown cruising in background.





WORKING IN WOOD—Chief Builder Robert W. Mueller, USN, works on a carving of a chief's emblem during his off-duty hours at Bainbridge, NTC.

Physical Fitness Testing Reports to be Simplified

Physical fitness will be "to the fore" in '64 as much as it was last year in the Navy, but there are a few changes in the administration of the program for periodic testing of physical fitness.

First, there is no requirement for district commandants and type, force and air training commanders to submit a report on the state of physical condition within their commands to the Chief of Naval Personnel this fiscal year. This report would normally have been due by 1 September.

Instead, the due date for the report has been changed, commencing in 1965, to 1 February, and will cover the previous calendar year. This means that the period from July to December 1963 will not be reported.

One additional paragraph must be included in the next physical fitness test. An over-all evaluation of intramural sports programs for active duty personnel within the command must be made. As in the past, procedures should be set up within existing chains of command to obtain information necessary for preparation of this report, and the report symbol is still BuPers 6100-1.

This information is promulgated in Change Two to BuPers Inst. 6100.2A of 24 Jan 1964.

A Handy Man With a Chisel

Navymen are expected to show a certain amount of versatility, and some carry it to great lengths. Take, for instance, Chief Builder Robert W. Mueller.

Technically, Chief Mueller is a carpenter attached to the U. S. Naval Training Center at Bainbridge, Md. But if the necessity arises, he can double as a yodeler, folk dancer, interpreter or singing waiter. These days, however, the chief confines his extracurricular activities to wood carving.

As a craftsman, Chief Mueller is not exactly an amateur. Born in Germany, at the age of 14 he entered a school in the Bavarian Forest where he hoped to learn the wood carving trade. Four years later he graduated, capable of carving the intricate figures used in church ornamentation.

But his training did him little immediate good. After graduation, he headed for New York. The employment situation being what it was, he became a yodeling waiter.

When World War II began he joined the Army's Corps of Engineers and was sent to Europe as an interpreter at a U. S. POW camp. After the war he returned to civilian life as a carpenter, then joined the Navy at the outbreak of the Korean conflict. As a Navyman, he supervised construction work at King Three camp near Pusan.

During the slack period after the conflict ended, he began to work with his knives and chisels. Today he spends a large part of his off-duty time making wood carvings for local service clubs and his friends.

Civic-Minded Chief

Dell Hendrix is up to his ears in civic work. He is a master CPO in Pearl Harbor who demonstrates leadership and accepts responsibility even after he takes off his chief's hat



UP-TO-DATE — Whaleboat of *USS Luce* (DLG 7) edges boat of *USS Fiske* (DDR 842) as destroyermen of DesDiv 82 modernize an old Navy sport.

each day. It keeps him pretty busy.

Hendrix has a lively interest in Boy Scout activities because of his two sons, and has a couple of titles following his name in the BSA district.

He manages Little League ball teams, and helps organize the work of keeping the playing fields in condition.

And he's an officer in the Community Association, which aids in the development and planning of community improvement projects.

This knack for making profitable use of his spare time has been beneficial to Hendrix in another way. During his last tour at San Diego he attended night school for four years and earned an associate degree in business.

Pilot Flies on Ground Too

When a Navy pilot devotes more than a normal amount of his time to airplanes, something is likely to happen. He might win lots of trophies, for instance.

LCDR A. W. Snyder of Attack Squadron 25 falls into this category. Besides being squadron maintenance officer and pilot of an A-1H (AD), he is a model airplane enthusiast who goes to the races. He seldom comes home empty-handed.

One of his planes holds a speed record on the West Coast, and he is the proud possessor of over 25 trophies for competition events in 1963.



AIR MINDED — LCDR A. W. Snyder, a Navy pilot of Attack Squadron 25, poses with models he built and raced to win over 25 trophies in 1963.

His models are both jet and propeller class. In 1963 he took them to seven meets in El Cerrito, Sacramento, Pleasanton, Oakland, Monterey, San Jose and Stockton, Calif., and then to the Pacific Coast championships in San Francisco.

His record for the seven meets was five first-place and two second-place trophies for jet speed, and in other categories he racked up 10 first place and five second place trophies.

At the Pacific Coast championships, Snyder won first place jet speed, first place in the National Air Race and three third places in other events.

It was in the National Air Race that his replica of a 1936 Caudron Racer set a West Coast National Air Race speed record of 89.95 m.p.h.

The performance of his stable of airplanes at the championships won for him the over-all meet trophy.



SHELL RACING team of MCB-4, with a Newfoundlander as coxswain, moves to starting buoy of Inter-Town Regatta held at Placentia, Newfoundland.

Good Fantail Liberty

Who needs to go ashore to pull a good liberty? Certainly not Paul Mays, a gunnery department seaman aboard uss *Newport News* (CA 148).

The Second Fleet flagship had pulled into San Juan harbor for a break from training exercises. Rather than hit the beach, Mays started his rest period on the fantail with some fishing tackle.

Sound boring? It didn't turn out to be for Mays. He soon was the proud conquerer of a 30-pound, 45-inch tarpon—reportedly the largest fish ever caught from his ship.

At the time of Mays' big moment, *Newport News*, flagship of the Second Fleet, was on a training cruise in the Caribbean, participating in the Atlantic Fleet's annual training program, Operation Springboard. As might be expected, Mays likes his tour.

THE WORD

Frank, Authentic Advance Information On Policy——Straight from Headquarters

• OFFICER NUCLEAR TRAINING —Officers who report for Nuclear Power School from the Fleet or a shore station are now required to serve only two years after completion of the training. Officers who are accepted for nuclear power training upon their commissioning, however, must serve a minimum of four years after completion of training.

Previously, all officers were required to serve a minimum of four years, regardless of their Navy background. The change was announced in BuPers Inst. 1520.88A.

Neither the one-year nuclear power course nor the six-month Submarine School (for officers destined for sub duty) may be counted toward completion of the minimum two- or four-year obligation.

The instruction also tightened the rank requirements for officers who apply for nuclear training. Present policy is to accept only those officers in the grade of lieutenant or below. Last year, lieutenant commanders were eligible.

In addition to meeting rank and obligated service requirements, applicants must be college graduates (or prospective college graduates) with credits in at least one year of college physics plus mathematics through integral calculus.

Applicants who are considered to have the requisite qualifications for the program will be ordered to Washington, D. C., for an interview with the Manager of Naval Reactors, Atomic Energy Commission. After acceptance, they will be ordered to Bainbridge or Mare Island for a six-month academic course. Upon completion of the Bainbridge or Mare Island school, they receive orders for an additional six-month course which involves operational training at one of the prototype sites at Idaho Falls, Idaho; West Milton, N. Y., or Windsor, Conn.

As a general rule, all officers ordered to duty in nuclear submarines or in the engineering and reactor departments of atomic surface craft will be graduates of this school. Submarine candidates must also attend sub school.

Line officers who enter the nuclear power program will remain unrestricted line officers, their sea duty promotion requirement will be safeguarded, and their command opportunity will be enhanced.

• OPINION POLL — The opinions of thousands of officers and enlisted personnel regarding various aspects of Navy life will be collected on a regular basis under a new procedure designated Navy Personnel Survey.

The NPS is designed to indicate what Navymen and women really think about programs and procedures which affect them.

Attitudes and opinions expressed will be used in developing future plans and policies, and in evaluating present management programs.

As planned, NPS opinion polls will be taken twice each year. Only men and women serving on active duty will be invited to fill out questionnaires.

With the exception of personnel in certain categories (see below), 10 per cent of all male officers, and five per cent of all enlisted men on active duty, will receive NPS forms.

Women officers normally won't be queried. However, some 20 per cent of all enlisted Waves will take part on a once-a-year basis.

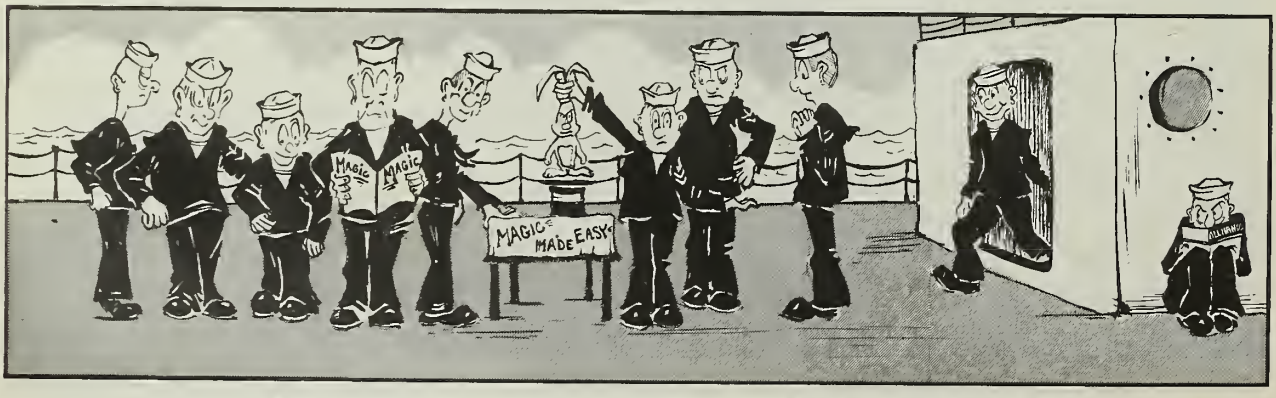
Those not eligible for polling are flag officers, transients, hospitalized personnel, Reservists on active duty for training or temporary active duty, personnel in confinement, recruits, and men and women undergoing training which leads to a commission.

The NPS is described in SecNav Inst. 1000.8.

• SEAVEY SEGMENT 2-64—Navymen in the 21 ratings included in Seavey Segment Two will start receiving orders in June which direct transfer ashore in October, provided they meet the sea duty commencement cutoff dates for Seavey Segment 2-64. These dates have been announced in BuPers Notice 1306 of 16 Jan 1964.

It should be noted that Segment Two Seavey assigners at BuPers only *begin* to issue orders in June of the year a man meets the Seavey cutoff date. Orders continue to be issued until June of the following year, or until every man has received a shore duty billet.

Inquiries to BuPers, asking where and when you may be assigned, cannot be answered satisfactorily until *at least* June of the year you fulfill the requirements to meet the Seavey cutoff date. However, if curiosity begins to kill the cat, consult Column W of the Enlisted Distribution and Verification Report (BuPers Report



YOU CAN'T PULL ALL HANDS out of a hat, so pass this copy on. Nine other shipmates are waiting to read it.

1080-14) which identifies your Seavey status by the use of a four-position code. Most inquiries can be answered within the command by use of the VEY status code.

Here are the sea-tour commencement cutoff dates for Seavey Segment 2-64:

RATE	DATE
CSCM, CSCS, CSC	Dec 60
CS1	Sep 60
CS2	Jun 61
CS3, CSSN	Mar 62
SHCM, SHCS, SHC	Sep 62
SH1	Dec S8
SH2, SH3, SHSN	Dec S6
MMCM, MMCS, MMC	Jun S9
MM1	Jul S7
MM2	Aug S8
MM3, MMFN	Dec 61
ENCM, ENCS, ENC	May 59
EN1	Sep S7
EN2	Mar S8
EN3, ENFN	Sep 61
MRCM, MRCS, MRC	Sep 60
MR1	Mar 60
MR2	Mar 61
MR3, MRFN	Dec 61
BTCM, BTCS, BTC	Dec S8
BT1	Jun S6
BT2	Jan S7
BT3, BTFN	Sep 60
BRCM, BRCS, BRC	Jan S9
BR1	Apr S9
EMCM, EMCS, EMC	Jul 60
EM1	Sep S8
EM2	Sep S9
EM3, EMFN	Jun 62
ICCM, ICCS, ICC	Apr 61
IC1	Mar 60
IC2	Apr 60
IC3, ICFN	Oct 62
SFCM, SFCS, SFC	Oct 59
SF1	Sep 57
SF2	Nov S6
SF3, SFFN	Sep 60
DCCM, DCCS, DCC	Jul 61
DC1	Jul S8
DC2	Oct S7
DC3, DCFN	Jun 61
PMCM, PMCS, PMC, PM1	Oct 60
PM2	May S9
PM3, PMFN	Jun 60
MLCM, MLCS, MLC	Jun 61
ML1	Jun 61
ML2	Mar 58
ML3, MLFN	Mar 61
EACM, EACS, EAC, EA1, EA2, EA3, EACN	Oct 62
CECM, CECS, CEC, CE1	Dec 61
CE2	Mar 62
CE3, CECN	Oct 62
EOCM, EOCS, EOC	Jun 62
EO1	Sep 61
EO2, EO3, EOCN	Oct 62
CMCM, CMCS, CMC	Dec 61
CM1	Mar 61
CM2	Dec 60
CM3, CMCN	Oct 62
BUCM, BUCS, BUC, BU1	Dec 61
BU2	Jul 60
BU3, BUCN	Oct 62
SWCM, SWCS, SWC	Mar 60
SW1	Dec S8
SW2	Dec S9
SW3, SWCN	Oct 62
UTCM, UTCS, UTC	Mar 62
UT1	Dec 60
UT2	Jun 60
UT3, UTCN	Dec 60
SDCM, SDCS, SDC	Mar 62
SD1	Jun S9
SD2	Feb 60
SD3	Jun S9
TN	Dec 61

New normal shore tours were established for the following rates for personnel who will be received for such tours on or after 1 Oct. 64.

RATE	TOUR LENGTH Old	New
CSCM, CSCS, CSC	30	24
SHCM, SHCS, SHC	30	36
ENCM, ENCS, ENC	30	24
MRCM, MRCS, MRC	36	30
ICCM, ICCS, ICC	30	24
PMCM, PMCS, PMC	30	24
MLCM, MLCS, MLC	30	24
EACM, EACS, EAC	30	36
EA1	24	30
CMCM, CMCS, CMC, CM1, CM2	30	24
BUCM, BUCS, BUC	30	24

• OPEN RATES—The "open rate" list has been revised. The new list applies to active duty TAR personnel and to qualified inactive duty Reservists who wish to be recalled to active duty.

TAR personnel whose rates are included in the list below are eligible, upon the expiration of their current active obligated service, to be separated from the TAR program and be ordered for general assignment. Upon completion of 12 continuous months of general assignment, and if qualified, they may be enlisted in the Regular Navy.

Inactive duty Reservists in any of these rates may volunteer for active duty general assignment if they are of a computed age of less than 31 years. (In the case of Waves, the computed age must be less than 26 years.) Computed age is determined by deducting from calendar age all active service (other than duty for training) performed in the Navy, Naval Reserve, Fleet Reserve, U. S. Coast Guard or U. S. Coast Guard Reserve. Men must not, however, have reached their 40th birthday.

Personnel must be eligible under the provisions of BuPers Inst. 1300.28A.

Fleet Reserve personnel in pay grade E-6 or above who are physically qualified for duty afloat or ashore, in the ratings of RM, ET, SO, MT or FT are eligible for recall to active duty if:

- They agree to remain on active duty for a period of two years.
- They have more than two years remaining before becoming eligible for retirement with 30 years' service.

In the revised open rates list, the following rates have been dropped: AM3; AO3; CE3; GMTC; GMT1; PH3; and TM2.

Following are the current open rates:

QM1, QM2, QM3	IC2, IC3
SM1, SM2, SM3	SF3
RD1, RD2, RD3	AT3
SOC, SO1, SO2, SO3	AXC, AX1, AX2, AX3
TM3	AQ1, AQ2, AQ3
MTC, MT1, MT2, MT3	AC3
FT1, FT2, FT3	ABH1, ABH2, ABH3
GMT2, GMT3	AE3
ETC, ET1, ET2, ET3	PR3
DSC, DS1, DS2, DS3	AG3
OM3	PT3
RM1, RM2, RM3	AR, AA, AN
CTC, CT1, CT2, CT3	SR, SA, SN
MA3	FR, FA, FN
MM1, MM2, MM3	CR, CP, CN
BT3	TR, TA, TN
BR1	HR, HA, HN
EM2, EM3	DR, DA, DN

The List is published as Change Three to BuPers Inst. 1130.4G.

• SCHOLARSHIPS — Children of commissioned or chief warrant officers in the 12th Naval District's Medical, Dental, or Medical Services Corps are eligible to apply for an annual $300 scholarship. The scholarship is offered by the Officer's Wives' Club of the Oakland Naval Hospital.

The award is an outright grant made each year, not to exceed $300. The number and value of the scholarships will be determined by the sponsoring club.

To apply for the scholarship, the applicant's Navy parent must be serving on active duty or on extended Reserve duty within the 12th Naval District. If the Navy parent has died or retired, he must have served his last active duty within the area of the 12th Naval District.

Those who compete for the award will be judged on the basis of merit and scholastic promise with no reference to financial need except in case of equally worthy applicants. Application forms may be obtained by writing: Administrative Officer, Naval Hospital, Oakland 14, Calif.

THE BULLETIN BOARD

Rotating to Rota? These Travel Tips Should Interest You

THE NAVAL BASE at Rota, Spain, is the Navy's largest installation in Europe. A joint base, under both Spanish and American commanders, the installation covers more than 6000 acres at the northeast corner of Cadiz Bay. It is the beginning of the 485-mile pipeline that feeds fuel to the Air Force bases in the interior of Spain and, it is a major supply center for the Sixth Fleet as well. Its aircraft and port facilities can handle the biggest and the fastest warplanes and warships in the Fleet.

Dependent Travel

You will be told when you receive orders whether travel of your dependents is authorized at government expense. Then you must decide whether your family should travel with you. Unless you're a senior officer or upper pay grade petty officer, the waiting period for base housing can be more than 90 days. Off-base housing is substandard and inconvenient, especially if you have small children. For this reason, you may wish to leave your dependents in the States until adequate housing can be obtained.

If you decide to take your family, have your personnel officer request entry approval. If you travel alone this can be taken care of after you are aboard. Entry approval and concurrent travel will usually be approved, even though government housing may not be available.

Passports are required for military dependents for entry into Spain and travel to other parts of Europe. Dependents may receive from the Bureau of Naval Personnel the necessary information on obtaining passports. Passports are not required for military personnel going to Spain for duty.

A sponsor is appointed to answer your questions and help you settle. If you have not heard from your sponsor and are taking leave before departing the States, write the Commanding Officer, giving an address at which your sponsor can contact you. He will meet you with transportation at point of arrival. Hotel reservations will be made if necessary. Advise your minimum space requirements and the most you can afford to pay, and let your sponsor know when and where you are arriving.

Everyone is required to have immunizations. Your dependents can obtain shots at any U. S. military clinic without cost.

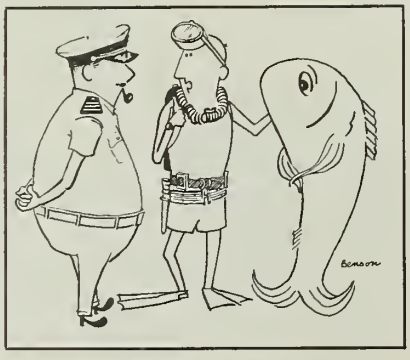
There is no U. S. banking facility in the area. You should make arrangements for checking and savings accounts before you leave. If you already have them, give the bank your new address.

Travel via Commercial Ship. — It would be wise to time your arrival in New York no later than 24 hours in advance of the ship's departure. Housing is available for Navy-sponsored passengers at the Fort Hamilton House in Brooklyn. Contact the Navy Overseas Passenger Transportation Office, Brooklyn Army Terminal, Brooklyn, New York. It is advisable to have with you sufficient funds to defray expenses that may arise due to unforeseen departure delays.

First Days in Spain

If you arrive at Torrejon AFB, via MATS or commercial aircraft, you will be met by a Navy ATCO representative. If your debarkation port is Algeciras, Spain, via commercial ship, you will be met by a Navy representative from Rota for the trip to the base about 60 miles away.

All-Navy Cartoon Contest
Robert J. Benson, DMSA, USN



"I met him on the last dive. Says he wants to join up."

Almost all families will have to spend some time in a hotel. In some cases, it is necessary to move larger families directly into off-base housing. If you do not wish to leave the choice of quarters up to your sponsor, he will help you decide whether or not to leave your family until you can make satisfactory arrangements.

Military personnel living in hotels while awaiting housing are entitled to a Temporary Lodging Allowance. This allowance ends after 60 days, or on moving to government quarters, or occupying non-hotel accommodations. The allowance begins the day you report aboard. If your family is not with you, you cannot draw the allowance; however, the 60 days is totaled from the time you check into the station. For instance, if you checked in 1 January and your family came aboard 1 February, you would have only 30 days to draw the special allowance. Temporary lodging allowance for living in hotels may also be drawn during the 10 days before your detachment. Current allowance rates may be found in *Joint Travel Regulations.*

Breakfast at hotels is the "continental" type — rolls and coffee, served on request in your room, or in the dining room. Most hotels will serve a U. S. type breakfast, but it is expensive. Lunch is the day's big meal and is served from one to 3:30 p.m. The evening meal is from nine to 11 o'clock. If you prefer, as many do, to eat aboard the base, there is a dining room at the Air Terminal, and all service clubs serve U. S. meals.

Don't over-tip. Most hotels and restaurants normally include a 15 per cent service charge, which takes care of the tip—check your bill to see. A one- or two-peseta tip is adequate for minor services by doormen, bellhops, etc. The 15 per cent tip is usually best in most cases.

Housing

Housing On-Base—Government family quarters are located on the base about three miles from the station's administrative and shopping center.

All units are of modern, concrete, ranch-style design with tile roofs and concrete tile or cork tile floors. They have central heating (oil burners) and electric water heaters. All utilities such as fuel oil, electricity (115/220 volts, 60 cycle), sewage, garbage collection, and care and maintenance of interior, exterior, and grounds of quarters—except for tenant-installed shrubs and plants—are furnished by the government free of charge.

Assignment of other than billet quarters to military personnel is based on priority determined by a point system according to rate/rank, time of reporting, date of request, time in service, and date of rank.

All units are furnished with simple, modern furniture.

Enlisted Barracks – There are four three-deck barracks for enlisted personnel. CPOs are assigned quarters in their own dormitory. PO1s are billeted two to a room in the wings of the main barracks. Other enlisted personnel are berthed in the wings, four or six to a cubicle, with two clothing lockers apiece. The barracks have rooms set aside for recreation, reading and writing. Games are available for check out. In addition, there is a pool room and a music room for those with phonographs or tape recorders. The general mess, swimming pool, library, chapel and Navy Exchange facilities are near the barracks.

Furnishings

It would be wise to leave your large items in storage unless you expect to live off-station permanently. When writing your sponsor, ask how long you can expect to wait for base housing and what he recommends for off-base furnishings. However, it is the policy to have occupants use privately-owned furniture in assigned quarters when your household goods have been shipped at government expense.

If you have them, bring your sewing machine, vacuum cleaner with ample disposal bags, floor and table lamps for living room, electric blankets, shower curtain, throw rugs, doormats, garden furniture, lawn mowers, record players, FM radio, air conditioners, curtain rods, and children's furniture. Also bring your old curtains—unless you like living in a fish bowl. They may prove adequate until you can obtain new ones or have some made. Be certain your electrical appliances are in good order.

If you have a washing machine in good condition, bring it, unless it is automatic and you plan to live off-base. The quarters on-base are equipped to handle automatic and wringer type washers. Families with small children will find it desirable to have a dryer, as there is no diaper service. Rains are heavy and frequent during the winter.

Hold baggage which will accompany you aboard ship should include such items as an iron, electric frying pan, toaster, coffee-maker, etc. Even if you expect to move on-base soon, you will probably spend some time in a hotel. These appliances will be helpful in preparing small snacks, especially for children who can't wait until 9 p.m. for dinner. Your picnic cooler thermos is also valuable for storing food and water from the base.

You can rent, at a small charge, a "hospitality kit" on request to the Officer's Wives Club or the Enlisted Navy Wives Club. This includes sheets, blankets, dishes, pots and silverware.

There is no American television aboard the base or in the area. There is a Spanish station in Sevilla, about 77 miles away, whose programs can be received at Rota if you have a high antenna. All programs are in Spanish and the variety is limited. Stateside sets must be adjusted at a cost of about $25. There is an Armed Forces FM radio station on the base. On the air 17 hours each day, its programs include news, music and drama shows.

Clothing

Although you will be living in sunny Spain, there is a cold dampness during the winter. Therefore, winter coats are necessary. Also rain equipment for the entire family, including rubber boots, is desirable.

The long summer in Rota calls for all kinds of summer clothing. In the rainy season after November the weather is usually cold, and a heavy waterproof - windproof carcoat for each member of the family is useful. Mail-order houses are a source of replacement but it takes six to eight weeks for delivery.

In addition to the Rota Navy Exchange, there is an Air Force Exchange in Sevilla, a two-hour drive from the base. Both exchanges carry stocks of inexpensive ready-made clothes.

Women who use particular brands of shoes or cosmetics would do well to bring them along, as the supply in Rota is limited. Some children's clothing can be bought in the exchange, though items such as shoes, house slippers and underwear may

NOW HERE'S THIS

Skua, Eagle of the Antarctic

A favorite photographic subject of Navymen working with Operation Deep Freeze is the skua—a large, graceful bird nicknamed, among other things, "Eagle of the Antarctic."

Skuas resemble gulls and petrels found near Antarctic shores, but have hawk-like beaks and are much larger, with a wingspan of from four to six feet. They have been known to attack man, but are willing subjects for shutterbugs who don't venture too close.

Deep Freeze scientists find the skua interesting for reasons other than photography, not the least of which is its amazing homing instinct. The birds migrate to the north as the Antarctic winter darkness approaches, and return to the cold continent for nesting during the summer season.

Skuas tagged in Antarctica under bird-banding programs have been recovered from South Africa, Australia, Peru, Chile and New Zealand.

A test of the skua's ability to pinpoint his home was made when scientists carried a bird nearly 800 miles inland from McMurdo Station. The skua was released, flew across the featureless Antarctic terrain and, within 10 days, had returned to its nest.

The birds feed on fish and other wildlife, and build their nests near penguin rookeries.

—Bruce M. Bryant, JOSN, USN.



be limited in size and quantity. Baby clothes and furniture are also limited. Clothing for young boys is limited in size and quantity.

Although good woolen and tweed material can be purchased in Gibraltar, about three hours away, it would be wise to take American materials, cotton and woolens, for Spanish dressmakers to work on. Prices for seamstresses are fair. Good material can be purchased in Rota, but the choice is limited, and wool is expensive. Patterns have to be ordered from the States. Men's suits can be tailor-made in Spain and Gibraltar.

Civilian clothes are authorized and encouraged for off-base wear. Even during the long warm season a coat and tie are required off-base after 8 p.m., and at all times in hotel lounges, hotel bars, restaurants, and at public events such as bullfights. Such clothing as tight-fitting or collarless sport shirts, levis and blue jeans, and two-piece bathing suits, are not considered acceptable. Shorts and slacks should not be worn in public. When visiting churches, women are required by custom to cover their arms and heads.

Schools

Grades run from one through 12. Bring birth certificates for any children to be enrolled in kindergarten or the first grade, report cards indicating grade levels, and copies of transcripts for junior high school students. First grade students must be six years old on or before December 31 of the year they enroll. The local school will write to former schools for the official transcripts of your children, but it is helpful if you can take records for consultation purposes. Parents of high school children should write the Principal, David Glasgow Farragut High, Navy #537, Box 19, Fleet Post Office, New York, N. Y., for information regarding courses and counseling.

Children who are authorized dependents of DOD military or civilian personnel may attend the two or three-year college at the Munich Branch of the University of Maryland in Germany. Costs for tuition and board are reasonable. In the past, sponsors of students living in the European area have arranged for air transportation to and from Munich to attend that branch of the University of Maryland. These flights

All-Navy Cartoon Contest
ENS Nat B. Read, USNR



"Like man, either square away— or Repartsville!"

are strictly on a space-available basis and are the personal responsibility of the sponsor and the student. In other instances space available student-flights have been arranged from England, France, Spain, Italy, Turkey and North Africa for college attendance in the United States under the same conditions of responsibility. For further information write the Munich Branch, University of Maryland, APO, c/o Postmaster, New York, N. Y.

Roman Catholic parents should bring baptismal certificates for children who will be confirmed during their stay in Rota.

Transportation

An automobile is considered essential for families, as public transportation is inadequate. The hub of the shopping center is located about three miles from the housing area.

Driving in Spain can be hazardous. Many roads are narrow, rough and crooked, although almost all of them are paved. The hazardous condition is caused by unbanked curves, narrow streets, wandering domestic animals, horsedrawn vehicles and bicycles.

Rough roads and lack of American auto parts are reasons your car should be in good condition to last a tour of duty. One of the American model compact cars would be ideal for driving in Spain. Your sponsor can quote the current prices of European compacts. The car you take should be in good condition, as parts and labor are scarce.

Liability insurance is compulsory, and it is highly advisable to have complete coverage. Spanish insurance companies provide excellent coverage for American vehicles at prices comparable to those in the U. S.

A commercial bus service runs from the industrial area in the station to the cities nearby. The hours are set up for home-to-work transportation of Spanish employees and off-duty military personnel.

The Navy Exchange operates a few taxis for on- and off-base use. There is a base shuttle bus running continuously from 9 a.m. to midnight starting at the Puerto Gate, stopping at the BOQ, the offices, hangars, clubs, Rota Gate and return.

Recreation

The Naval Station has a bi-weekly newspaper, *El Rotando*. European *Stars and Stripes* and a fairly complete line of American periodicals are sold in the Navy Exchange.

As for Special Services and clubs, Rota has some of the finest facilities at home or abroad.

The intramural program at Rota includes 13 sports. Rota varsity teams compete in the Spain-Morocco league against Air Force and Navy teams.

The major varsity and intramural sports are basketball, baseball, flag football, volleyball, golf, pistol and rifle shooting, bowling, handball, softball, track and tennis. Soccer, trap and skeet shooting, swimming, ping-pong, pool and archery can also be scheduled.

A stretch of beach on the Bay of

All-Navy Cartaan Cantest
Alfred B. Castra, SK2, USN



"What stack number did yau use ta arder these dogs, Stanley?"

Cadiz just beyond the station housing area has been developed into one of the best warm-weather recreation features at Rota. Facilities include a shaded picnic area overlooking the bay, dressing rooms, a kiddy pool, and shower facilities. Lifeguards are on duty throughout the season.

Picnic areas are located in a pine wood adjacent to the riding stable and skeet range. Facilities include portable barbecue pits, picnic tables, head facilities, and horseshoe and volleyball areas. Special services will deliver charcoal, ice and ice chests as requested.

Both lightweight and American-type bicycles are for rent at 10 cents an hour or $1.00 daily. The bicycles may be used outside the base during daylight hours only.

Films, at no admission charge, are shown three times daily – at 1430, 1830 and 2100–in the 500-seat station theater. The theater may be reserved for lectures and training films. La Playa Players, a little theater group, presents dramatic productions.

The hobby shop has an auto motor hobby repair area, photographic laboratory, leather tooling facility, electronics area, model-making shop, carpenter shop, and a ceramic area. Raw material may be bought at the hobby shop.

List of Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Who's Been Sleeping in my Bed (2550) (C) (WS): Dean Martin, Elizabeth Montgomery.

Take Her She's Mine (2551) (C) (WS): Comedy; James Stewart, Sandra Dee.

All The Way Home (2552): Drama; Jean Simmons, Robert Preston.

The Big Carnival (2553): Drama; Kirk Douglas, Jan Sterling.

Whispering Smith (2554); Alan Ladd, Brenda Marshall (Re-Issue).

Love Letters (2555); Jennifer Jones, Joseph Cotten (Re-Issue).

Reap the Wild Wind (2556); John Wayne, Ray Milland (Re-Issue).

Sierra (2557); Audie Murphy, Wanda Hendrix (Re-Issue).

Tom Jones (2558) (C): Comedy, Albert Finney, Susannah York.

Holiday Inn (2559); Musical; Bing Crosby, Fred Astaire (Re-Issue).

The Brigand (2560); Jody Lawrence, Daze Robbins (Re-Issue).

Alice in Wonderland (2561); Leon Errol, Louise Fazenda (Re-Issue).

China (2562); Loretta Young, Alan Ladd (Re-Issue).

Montana (2563); Errol Flynn, Alexis Smith (Re-Issue).

The Big Clock (2564); Ray Milland, Charles Laughton (Re-Issue).

Desert Fury (2565); John Hodiak, Lizabeth Scott (Re-Issue).

Move Over Darling (2566) (C) (WS): Comedy; James Garner, Doris Day.

Charade (2567) (C): Comedy; Cary Grant, Audrey Hepburn.

Samson and Delilah (2568); Hedy Lamarr, Victor Mature (Re-Issue).

The Greatest Show on Earth (2569); Betty Hutton, James Stewart (Re-Issue).

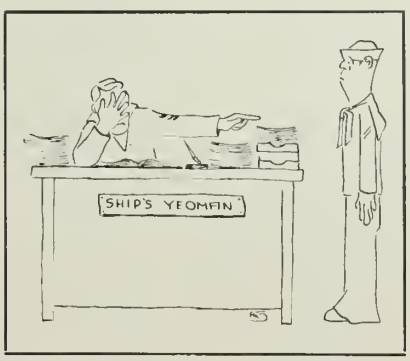
The Day and the Hour (2570) (WS): Drama; Simone Signoret, Stuart Whitman.

Man's Favorite Sport (2571) (C): Comedy; Rock Hudson, Paula Prentiss.

Sunday in New York (2572) (C): Comedy; Cliff Robertson, Jane Fonda.

Surf Party (2573): Comedy; Bobby Vinton, Patricia Morrow.

All-Navy Cartoon Contest
Frederic W. Donour, Jr., PC3, USN



"Go tell the bosun that he knows the chow line isn't stowed here on Mondays!"

Now's the Time to Ask For Those Navy Wings of Gold

Here's an opportunity for junior officers to win Navy wings of gold. Vacancies exist in officer flight training classes. Applications are desired from interested junior officers, particularly those commissioned after 1 Dec 1961.

Selected candidates are sent to NAS Pensacola for six weeks of preflight training. Then they receive eight months of primary and basic flight training while learning to master cross-country, formation, night and instrument flying. An additional four months are spent in advanced training.

Three categories of specialization are open to flight students: helicopter, multi-engine patrol and carrier type aircraft.

Applicants must be less than 26 years of age at time of application; must be physically qualified; and must have successfully completed a minimum of four semesters of undergraduate work or its equivalent at an accredited school.

Applications should be submitted as soon as possible to the Bureau of Naval Personnel. Complete information concerning qualifications and application procedures is contained in BuPers Inst. 1520.20B.

Great Lakes DS School Opens for Business

Classroom training in the Data Systems Technician (DS) specialty is underway at Great Lakes, Ill. A 38-week DS "A" school course, an expansion of the electronics technician school, was opened on 6 Jan 1964.

The first 28 weeks of the course are devoted to basic electronics.

From basic electronics DS students go on to 10 weeks of specialized training in basic computer techniques. This curriculum is geared toward the finer points of servicing and repairing computers, data display and transmission equipment, and the Naval Tactical Data System.

Before the new "A" school opened, all personnel input requirements to DS had been met through changes in rating on the part of senior petty officers experienced in other electronics fields.

POMA—Where a Leading Petty Officer Gets to Be That Way

OFTEN SOMEONE IS described as a "born leader." This is merely a figure of speech. No offense meant to Mother Nature, but there's a lot of making to be done to produce a good leader after he has been born.

Recognizing that this "making of a leader" requires additional help, NAS Whiting Field at Milton, Fla., has established a Petty Officers' Military Academy.

POMA, as it is known, has been operating for a few years now. Its purpose is to reemphasize the need for effective leadership within the petty officer ranks in the Navy, and to equip its students with a few tools of the trade.

What good is derived from attending a course at POMA? No petty officer can expect a pay raise or promotion just because he has attended.

But he can expect an increased understanding of responsibility, and a gift more precious than money—the gift of self-assurance.

POMA teaches, first and foremost, that *personal example* is the basic element of leadership. You cannot very well, as a leader, reprimand someone for doing something he saw you doing yesterday. By the same token, if you're expecting a topnotch job from a subordinate, it's only natural that he thinks your conception of topnotch is about the same as the last job you yourself completed. And chances are that he matches his thoroughness on a job by the thoroughness of your instructions.

In short, if you are going to expect high performance from your subordinates then you must be a high performer yourself, in many ways. You must be able to say—at least to yourself—"Do as I say *and as I do.*"

If you want to be an effective leader you must also develop good management abilities and display a moral responsibility toward your men.

TO PUT THESE TENETS across in a digestible form to first and second class petty officers, the course at the Petty Officers' Military Academy is divided into six categories.

The instructors are volunteers—three chiefs, two PO1s and an officer. The Academy's student body is drawn from petty officers stationed at Whiting Field. Classes are made up of about 18 students and last for three weeks. They are conducted on a lecture and seminar level.

The first phase of the three-week course is 21 hours devoted to Drill and Command. Military drill teaches self-discipline and helps the students develop a sturdy mental and physical foundation for the instruction which follows. About 17 hours are spent actually drilling, and the other time is spent in the classroom.

The command portion includes instruction on taking orders as well as giving them.

In the second phase, 17 hours are devoted to the subject, Teaching Principles. POs are taught how to prepare lessons (such as for training lectures), how to give presentations, and how to conduct group discussions. During this phase each student is required to prepare and give two 10-minute speeches. The students receive help in developing a skill in self-expression—a very important attribute.

NEXT ITEM in the curriculum is Military Justice, also to which 17 hours are devoted. Students study and review the Uniform Code of Military Justice so they will have a better understanding of the laws they are required to live up to, and in turn what they must inspire their subordinates to comply with. POs are taught various ways to help prevent disciplinary cases amongst their charges; how to exert a favorable influence over prospective disciplinary cases before their actions give cause for punishment.

After Military Justice, students spend 17 hours studying World Situation. This is one of the most popular parts of the course. Here students receive a concentrated background in geopolitics and are lectured on current world affairs. They are thus treated to a broader perspective of their mission, and are provided with a means better to understand current events.

Phase five, a psychology course, is devoted to the study of Human Behavior. An understanding of this subject is essential for anyone who aspires to leadership. Guest speakers contribute to the success of this phase of the course.

The wind-up phase is presented by the base Career Information Team, which gives the students a presentation about the benefits of a naval career.

Then, during graduation ceremonies, the base commanding officer or a prominent guest speaker gives a talk emphasizing the challenge that lies ahead for the petty officers.

Having graduated, the POs return to their normal working environment, better equipped to serve the Navy, themselves and their shipmates.

Less Receiving Station Layovers for Navymen With Overseas Orders

Until recently, a Navyman with orders overseas could expect to check into a MATS or MSTS Navy receiving station for overseas transportation. And there he would stay for two days to two weeks before he could continue on his way. But a new instruction has changed all that.

Under a new system you — and your dependents—will have reservations for transportation overseas before you leave your old duty station. You will report directly to the transportation terminal, check your baggage, and leave for your new duty station immediately.

BuPers Inst. 4650.14 outlines the procedures to be followed when you receive orders to a ship or station overseas (including Alaska and Hawaii).

When your command receives your assignment card, you'll probably be called into the personnel office, where the situation will be explained in detail. You'll then be given several days to decide how much leave you will request and whether or not you will take your dependents with you.

If, when it's time to report back to your personnel office, you still aren't sure about taking your family with you, initiate a request for concurrent travel anyway. It is fairly

easy to cancel or delay the request if you decide your dependents will remain in the States, but it may not be so easy to arrange for transportation, passports and immunizations at the last minute.

Because you will normally not report into a receiving station, you and your family will be expected to be ready to travel when you leave your present duty station. You and your dependents will need immunizations, and your wife and children may need passports and visas. Your command will help you to arrange for these things before you detach.

After you have made your leave request, and your command has decided when you may be released, the personnelmen will determine when you would arrive at the MATS or MSTS terminal. This data will be sent to the appropriate transportation authorities.

When this information is received by the transportation office, you and your family will be assigned reservations on a ship or plane and your leave will be adjusted to end on the day your transportation is due to depart.

If the ship or plane to which you have been assigned for transportation is scheduled to depart within the five days after your arrival, your leave will be lengthened accordingly. Although it is not necessary that you take this extra leave, if you arrive earlier than the reporting date you will be assigned to a receiving station.

On the other hand, if your transportation is scheduled to leave within three days before your arrival at the terminal, your command will be notified. Your leave will then be shortened and your orders modified so that you and your family can catch the assigned ship or plane. Your leave will not normally be cut, however, if you have requested less than 10 days.

Once your terminal arrival date has been set by the transportation authorities, your orders will be processed the same as any other orders. You will be transferred, probably take leave, and arrive at the terminal on the date specified in your next set of orders.

Show up ready to travel. You'll be on your way immediately.

Terminals and Standby Stations for Travel from CONUS

In the following paragraphs, the air terminal serving overseas destinations is given, followed by the appropriate standby reporting stations associated with the terminal. Personnel will normally be ordered to report directly to an air or sea terminal a few hours before departure. There will be no need to go to the standby reporting station unless for some reason, such as lack of funds, it becomes necessary to terminate leave earlier than expected and check in before the time specified in the orders. In such cases personnel go to the terminal if checking in not more than one day early and go to the standby reporting station if checking in more than one day early.

Air Terminals

• **MATS Terminal, Charlestan AFB,** Charleston, S. C., serves the following destinations. *Standby reporting stations* are COMSIX (for officers reporting), and NAVSTA Charleston (for enlisted reporting).

Puerta Rica
Canal Zane
Recife, Brazil
Ascensian Island
***India**
***Ceylan**
***Pakistan**
Saudi Arabia
Libya
***Far travel originating in the Eastern United States.**

• **MATS Terminal, NAS Norfalk,** Va., serves the following destination. *Standby reporting stations* are COMFIVE (for officers reporting), and RECSTA Norfolk (for enlisted reporting).

Guantanama Bay, Cuba

• **MATS Terminal, McGuire AFB,** Wrightstown, N. J., serves the following destinations. *Standby reporting stations* are COMFOUR (for officers reporting), and RECSTA Philadelphia (for enlisted reporting).

Azores
Bermuda
Iceland
Newfaundland
Greenland
Labradar
United Kingdam
France (except Nice)
Germany
Law Cauntries
Scandinavia
Spain
Part Lyautey, Moracca
U. S. Sixth Fleet

• **MATS Terminal, Travis AFB,** Fairfield, Calif., serves the following destinations. *Standby reporting stations* are COMTWELVE (for officers reporting), and RECSTA Treasure Island (for enlisted reporting).

Pacific Islands
Far East
Australia
New Zealand
***Burma**
***India**
***Ceylan**
Pakistan
***Far travel originating in the Western United States.**

• **MATS Terminal, McChard AFB,** Tacoma, Wash., serves the following destination. *Standby reporting station* is COMTHIRTEEN (for officers and enlisted reporting).

Alaska

• **John F. Kennedy Internatianal Airpart,** New York, N. Y., serves the following destinations. *Standby reporting stations* are COMTHREE (for officers reporting), and RECSTA Brooklyn (for enlisted reporting).

Italy
Greece
Turkey
Egypt
Lebanon

Sea Terminals

• **MSTS Terminal, Braaklyn Army Terminal,** N. Y., serves the following destinations. *Standby reporting stations* are COMTHREE (for officers reporting), and RECSTA Brooklyn (for enlisted reporting).

Europe
Mediterranean
Guantanama Bay, Cuba
San Juan, Puerta Rica
Panama

• **MSTS Terminal, Naval Supply Center,** Oakland, Calif., serves the following destinations. *Standby reporting stations* are COMTWELVE (for officers reporting), and RECSTA Treasure Island (for enlisted reporting).

Hawaii
Japan
Karea
Guam
Philippines
Taiwan
Okinawa

• For destinations not listed above, there is no one specific terminal or port of embarkation. BuPers or COMTWELVE are consulted by travel activities in such cases.

Election Year Roundup on Absentee Voting for Servicemen

MOST NAVYMEN will be far from their home states when the elections are held this November. Nevertheless, many of them—and their wives—will join the millions of U. S. citizens who will turn out to elect city, county, state and federal officials.

The Navy families will vote by absentee ballot. All servicemen and their dependents are eligible to vote by absentee ballot in the state where they are legal residents, providing they qualify for voting privileges under the laws of that state.

The Voting Assistance Act of 1955 (Public Law 296) describes recommended procedures for absentee voting by servicemen and their dependents. Each state, however, controls its own voting laws, and though Public Law 296 is being slowly accepted by most states, there are still wide variations from place to place. It's easy to see how claiming your voting privileges can become downright complicated.

But it doesn't have to be.

The Voting Assistance Act also provided for each military command to have a designated Voting Assistance Officer. This officer is available to see that you have all the correct information about your state voting laws and that you don't get tangled up in legal language. As election time nears, he's a good man to contact.

The requirements which you must meet before you can vote in any state fall into three categories: age, residency, and registration and/or application for your ballot.

Here they are in general:

Age – All states except Alaska, Georgia, Hawaii, and Kentucky require that a person be at least 21 years of age in order to vote in a general election. In both Georgia and Kentucky 18-year-olds may vote. Alaska's voting age is 19 and Hawaii's is 20.

Residency—All states and territories require a minimum period of residency as a prerequisite to voting, but the time requirement varies. In some states, six months' residency is all that is needed, while in others you may have to be a resident for one or two years. In South Dakota, for example, you must be a resident of the United States for five years, a state resident for one year, a county resident for 90 days and a resident of the precinct for 30 days.

In most states you, as a Navyman, will get a special consideration on the residency requirement. The state, city, or county (township) in which you lived before entering military service is usually considered your residence while in the service, unless you have taken steps to become a resident elsewhere.

As an example of the residency laws, a man who has lived with his parents in Watkins, Colo., enlists in the Navy at a recruiting office in Denver. He has been a resident of Watkins for six months. Since his residency continues in Watkins while he is in the service, and the residency requirement in Colorado is one year, he will be qualified, under the voting laws, to cast his ballot after he has been in the service for six months.

If you have bought a home in another state since you joined the Navy, you have not necessarily changed your legal residence, even though you live in the house. If you are transferred and rent or lease your home, you have not, by this act, changed your residence. Your voting officer is the best person to clear up this question in individual cases.

Owning a home in a state where you are not a resident, of course, does not exempt you from paying local property taxes.

When you apply for absentee registration or ballot, you must list your legal address as a place where you actually lived before enlistment. In the case of the Navyman who lived in Watkins, for instance, he could claim his Watkins address as his official residence, even though his parents might no longer be residing there. He could not, however, claim residency at the recruiting office in Denver.

The residency laws usually hold that the voting residence of your wife is the same as yours. Your voting officer can also give you specific information on your wife's voting privileges.

Registration and Application – Although most states require that you register before voting, most of them will allow absentee registration. In some states you must register before you apply for your ballot, while in others you may send your registration with your voted ballot.

Some states, Alabama for instance, do not permit registration by mail. If this is true in your home state, it may be possible for you to register the next time you are home on leave. Many states will accept the registration of a minor if he will be of age before the next general election or if he is on active military duty. Again, check with your voting officer.

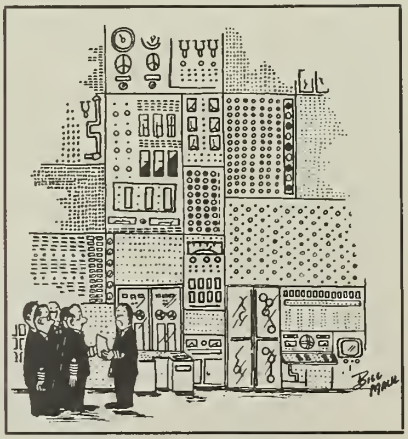
After you have registered (if preregistration is required) you must apply for your ballot. The easiest way for a Navyman—and his dependents in most cases—to make this application is by using the Federal Post Card Application for Absentee Ballot. Better known simply as the FPCA, it may be obtained from your voting officer who will assist you in filling it out if you desire.

In many states the FPCA can also be used when applying for registration.

In addition to requirements of individual states, you should follow these rules when filling out your FPCA:

- Print or type all information except your signature. Whichever method is used, be sure to include

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"It finally came up with an answer—port is left, starboard is right."

all information, and be sure it is clear and legible. Pay special attention to military addresses (especially abbreviated forms), which are often confusing to civilian officials. Your present address should be printed or typed so clearly that no letter or digit will be misread.

• Your name must appear twice on the card—once printed or typed and once in your own handwriting. Although anyone may fill out the card for you, only you, the applicant, may sign it, unless your state specifies otherwise.

• List your county as well as street address or rural route when giving your legal residence. This helps state voting officials speed action on the application.

• If you had more than one address in a state, give only the most current address.

• Whenever possible, have your FPCA certified by your voting officer, commanding officer or some other commissioned officer or authorized civilian, such as a notary public. Some states will accept certification by a petty officer.

If your state requires certification, and if the FPCA is NOT certified, it will be returned to you—perhaps too late for you to receive a ballot.

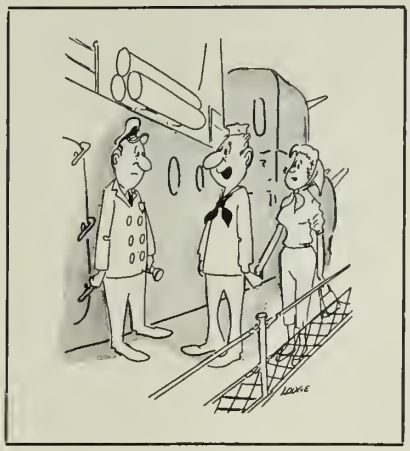
• Mail your FPCA as early as your state permits. The card requires no postage.

• Before addressing your application check your state's mailing instructions. In some cases the card is to be addressed to the Secretary of State (who then sends it on to the proper local official). In other instances it must be addressed to a local official such as county clerk, auditor, or election board.

When you receive your ballot, do not open the envelope until you have read the instructions on the outside. This is important because some states require that the envelope be opened in the presence of a commissioned officer, notary public or some other authorized person. If there are no instructions on the outside, you may open it as regular mail.

Inside the envelope you will probably find full instructions to guide you in the absentee voting process. Your voting officer will advise you if you have any technical questions or give you instructions if there were none in the envelope. The actual marking of the ballot, however, must be done by you, in private. This is required by both federal and military law.

All-Navy Cartoon Contest
LCDR Billups E. Ladge, USN



"Four hours out?—Deployment?—Med?—Say, isn't this the family cruise?"

The following state-by-state rules apply to Navymen. The requirements may differ for non-military personnel as well as for your wife and family.

Alabama

Requirements — Residence: One year in state, six months in county, three months in precinct. Must be able to read and write any article of the U. S. Constitution in the English language, be of good character and a good citizen as determined by the Board of Registrars. Must pay poll tax of $1.50 annually unless over 45 or a veteran. (If in arrears, you must pay tax for the two preceding years). Poll tax is due between 1 October and 1 February prior to the election day.

Registration—Permanent, once you have registered. Register in person at the office of the Board of Registrars in county of residence on the first and third Monday of each month (no registration 10 days prior to election).

Election — Federal, state and county officers and presidential electors.

Application for ballot—Mail FPCA to County Registrar in Equity between 45 and five days before election.

Ballot deadline—Must be received by election officials no later than day of election.

Alaska

Requirements — Residence: One year in state, 30 days in district. Must be able to read or speak English. Exception: those who participated in the General Elections of 1924. Minimum age—19.

Registration—Not required in advance; is a part of the voting procedure.

Election — Federal, state officers and presidential electors.

Application for ballot—Mail FPCA to District Magistrate or Secretary of State, Box 971, Juneau, postmarked four to 90 days before election.

Ballot deadline — Must be postmarked on or before election day. (Make sure that registration certificate with the ballot is properly attested to.)

Arizona

Requirements — Residence: One year in state, 30 days in county and precinct. Be able to read the Constitution; write your name; be registered.

Registration — Permanent if you voted in last primary or general election. Apply for registration and ballot simultaneously by FPCA.

Election—Federal, state, local officers and presidential electors.

Application for ballot—Mail FPCA to county recorder within 30 days prior to the Saturday before election day.

Ballot deadline—Will be accepted up to 1800 on election day.

Arkansas

Requirements — Residence: One year in state, six months in county, 30 days in precinct. Payment of poll tax not required of armed forces personnel.

Registration—Not required.

Election — Federal, state, county and local officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA, witnessed by commissioned officer, to county clerk within 60 days before election.

Ballot deadline — Must arrive before 1830 on election day.

California

Requirements – Residence: One year in state, 90 days in county, 54 days in precinct. May vote for presidential electors after only 54 days in state. Be registered.

Registration – Permanent if you voted in last general election. Apply by FPCA simultaneously for registration and absentee ballot.

Election – Federal, state and local officers and presidential electors. Vote on one legislative bill and Constitutional amendments.

Application for ballot–Apply by FPCA at any time to county clerk.

Ballot deadline–Must be received by state no later than 1700 on day before election day.

Colorado

Requirements – Residence: One year in state, 90 days in county and 15 days in precinct. Be registered.

Registration – Permanent if you voted in last election. Apply by FPCA for registration and absentee ballot.

Election – Federal, state and county officers and presidential electors.

Application for ballot–Mail FPCA to county clerk between 90 days and noon Friday before election.

Ballot deadline–Must arrive by 1700 on election day.

Connecticut

Requirements – Residence: One year in state, six months in town. Read Constitution or Connecticut statutes; be of good moral character and sound mind; take oath of admission as a voter; be registered.

Registration – Mail FPCA, witnessed by non-commissioned officer or above, to town clerk at any time.

Election–Federal and state officers and presidential electors.

Application for ballot–Mail FPCA to clerk of municipality no more than 45 days before election.

Ballot deadline–Must arrive by 1200 election day.

Delaware

Requirements – Residence: One year in state, three months in county, 30 days in precinct. Read state Constitution; write name; be registered.

Registration–Permanent by voting regularly. Apply by FPCA when requesting absentee ballot prior to 30 days before election.

Election–Federal, state and county officers and presidential electors.

Application for ballot–Mail FPCA to the Department of Elections, county of your residence, any time before general elections.

Ballot deadline–Must arrive before 1200 election day.

District of Columbia

Requirements – Residence: One year. Be 21; be registered.

Registration–Send FPCA to D. C. Board of Elections, District Bldg., 20004 prior to 45 days before election.

Election–Presidential electors.

Application for ballot – FPCA mailed for registration serves as application for absentee ballot.

Ballot deadline–Must be received by 2000 election day.

Florida

Requirements – Residence: One year in state, six months in county. Be registered.

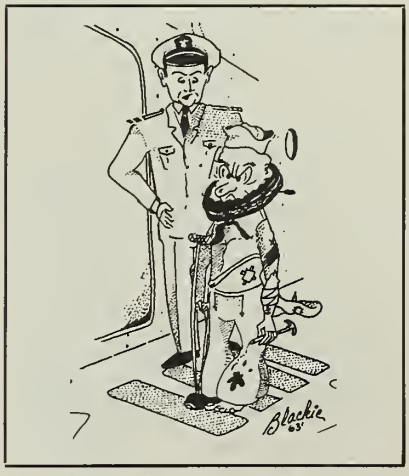
Registration–Permanent in most counties if you voted once every two years. Register when applying for absentee ballot, but no later than 30 days prior to election.

Election–Federal, state and county officers and presidential electors. Vote on constitutional amendments.

Application for ballot–Mail FPCA, witnessed by a commissioned officer, to Supervisor of Registration, county of residence, between 45 and five days before election.

Ballot deadline – Must arrive by 1700 day before election.

All-Navy Cartoon Contest
Emmet J. Geisler, YN1, USN



"All right Jowers, what's your excuse for being late for muster this time?"

Georgia

Requirements – Residence: One year in state, six months in county. Read and write U. S. or Georgia Constitution; be of good character and a good citizen; be registered. Minimum voting age is 18.

Registration – Permanent if you voted once every three years. Request "Military Registration Card" from tax collector, tax commissioner or registrar in county of residence at any time. Register before applying for absentee ballot.

Election–Federal, state and county officials and presidential electors. Vote on Constitutional amendments.

Application for ballot–Mail FPCA any time to Ordinary, county of residence.

Ballot deadline–Must arrive before polls close election day.

Hawaii

Requirements – Residence: One year in state, three months in representative district. Speak, read, write English or Hawaiian; be registered. Minimum age 20.

Registration – Permanent if you voted in last general election. Request "Affidavit on Application for Registration" form from County Clerk (City Clerk for Honolulu) at least 90 days before election. Return the form to reach clerk not later than third Wednesday before election.

Election – Federal, state, county and local officers and presidential electors.

Application for ballot–Mail FPCA to County Clerk (City Clerk for Honolulu) between 60 and 10 days before election.

Ballot deadline–Must arrive before election.

Idaho

Requirements – Residence: Six months in state, 30 days in county. For county elections, six months in county and 90 days in precinct. Read and write; be registered.

Registration – Permanent if you voted in the last general election. Register when voting absentee ballot.

Election—Federal, state and county officers and presidential electors. Vote on certain Constitutional amendments.

Application for ballot—Mail FPCA to county auditor any time up to five days before election.

Ballot deadline—Must arrive before polls close on election day.

Illinois

Requirements — Residence: One year in state, 90 days in county, 30 days in district.

Registration — Permanent if you voted once in last four years. Not required in most counties for armed forces personnel.

Election—Federal, state and county officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to board of election commissioners or county clerk no earlier than 100 days before election.

Ballot deadline — Must arrive by day of election.

Indiana

Requirements — Residence: Six months in state, 60 days in township and 30 days in ward or precinct. Be registered.

Registration — Permanent if you voted in any general election. Apply by FPCA for registration and absentee ballot no later than 29 days prior to election.

Election—Federal, state and local officers and presidential electors.

Application for ballot—Mail FPCA to reach clerk of circuit court, county of residence, 60 days before general election.

Ballot deadline — Must arrive by 1800 election day.

Iowa

Requirements — Residence: Six months in state, 60 days in county. Be registered in some places.

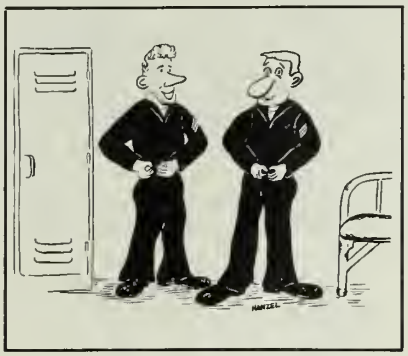
Registration—Execute affidavit on back of absentee ballot envelope.

Election — Federal, state, county and local officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to county auditor, city or town clerk no earlier than 90 days before election.

Ballot deadline—Must arrive before election day.

All-Navy Cartoon Contest
Joseph J. Hanzel, AE3, USN



"Sure glad there weren't fifty original colonies."

Kansas

Requirements — Residence: Six months in state, 30 days in ward or township.

Registration—Permanent by voting in general elections. Not required of armed forces personnel.

Election — Federal, state, county and local officers and presidential electors.

Application for ballot—Mail FPCA to Secretary of State, Topeka, 65 days before general election.

Ballot deadline—Must arrive by 1300 day before election.

Kentucky

Requirements — Residence: One year in state, six months in county, 60 days in precinct. Be registered. Minimum age: 18 years.

Registration — Permanent if you voted two consecutive years. You will be registered when ballot application is accepted.

Election—Federal, state and local officers and presidential electors.

Application for ballot—Mail FPCA to county clerk prior to 20 days before election.

Ballot deadline — Must arrive before polls close election day.

Louisiana

Requirements — Residence: One year in state, six months in parish, three months in precinct. Be registered.

Registration — Permanent in some places by voting once every two years. If not previously registered, register in person any time except during 30 days before election.

Election—Federal, state and local officers and presidential electors.

Application for ballot—Mail FPCA or other signed request to clerk of court in parish of residence (in Orleans to civil sheriff) between 60 and seven days before election.

Ballot deadline — Must arrive at polls by election day.

Maine

Requirements — Residence: Six months in state, three months in municipality. Read and write English; be registered.

Registration—Apply by FPCA for registration and absentee ballot.

Election—Federal, state and county officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to Secretary of State, Augusta, or clerk of city or town of residence any time. FPCA must be witnessed by a non-commissioned officer or above.

Ballot deadline—Must arrive before 1700 on election day.

Maryland

Requirements — Residence: One year in state, six months in county. Be registered.

Registration — Permanent if you voted once in last five years. You are registered when voting by absentee ballot.

Election — Federal officers and presidential electors.

Application for ballot—Mail FPCA to Secretary of State, Annapolis, in time to be sent to Board of Supervisors of elections 10 days before election.

Ballot deadline—Must arrive before polls close on election day.

Massachusetts

Requirements — Residence: One year in state, six months in city or town. Must be able to read the State Constitution and write English; be registered.

Registration—Permanent. You are registered when ballot application is accepted.

Election—Federal, state and local officers, presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to city or town clerk any time.

Ballot deadline — Must arrive before polls close on election day.

Michigan

Requirements — Residence: Six

months in state, 30 days in city or township. Must be registered.

Registration – Permanent if you voted regularly. (Once in two years in some places). Apply for duplicate registration forms when applying for ballots as early as 75 days before election. Return forms with ballot.

Election – Federal, state, county and local officers and presidential electors.

Application for ballot–Mail FPCA to reach city or township clerk as early as 75 days before election.

Ballot deadline – Must arrive before polls close on election day.

Minnesota

Requirements – Residence: Six months in state, 30 days in election district. Registration required in some places.

Registration – Permanent if you voted once in four years. Apply by FPCA for registration and absentee ballot.

Election – Federal, state, county and local officers and presidential electors. Vote on Constitutional amendments.

Application for ballot–Mail FPCA to county auditor any time.

Ballot deadline – Must arrive before polls close on election day.

Mississippi

Requirements – Residence: Two years in state, one year in election district. Read and write State Constitution; be registered; pay $2.00 poll tax except armed forces personnel and wives when voting by absentee ballot.

Registration – Permanent. Apply by FPCA for registration and absentee ballot. Complete registration four months before general election.

Election–Federal, state and county officers and presidential electors.

Application for ballot–Mail FPCA to reach city or county registrar not earlier than 60 days prior to general election.

Ballot deadline – Must arrive by day of election.

Missouri

Requirements – Residence: One year in state, 60 days in county. Registration required in some places.

Registration – Permanent if you meet voting requirements. Not required of armed forces personnel and their wives.

Election–Federal, state and county officers and presidential electors.

Application for ballot–Mail FPCA to clerk of county court or board of election commissioners, place of residence, any time, for "Official War Ballot."

Ballot deadline – Must arrive before 1800 the day after election day.

Montana

Requirements – Residence: One year in state, 30 days in county or precinct. Be registered.

Registration – Permanent if you have voted regularly. Mail FPCA to reach county clerk prior to 45 days before election.

Election–Federal, state and county officers and presidential electors. Vote on Constitutional amendments.

Application for ballot–Mail a second FPCA to reach county, city or town clerk within 45 days before election. Note: You may not request ballot until registered.

Ballot deadline–Must arrive before polls close on election day.

Nebraska

Requirements – Residence: Six months in state, 40 days in county, 10 days in precinct or ward. Be registered in cities of over 7000 and in Douglas, Sarpy and Lancaster counties.

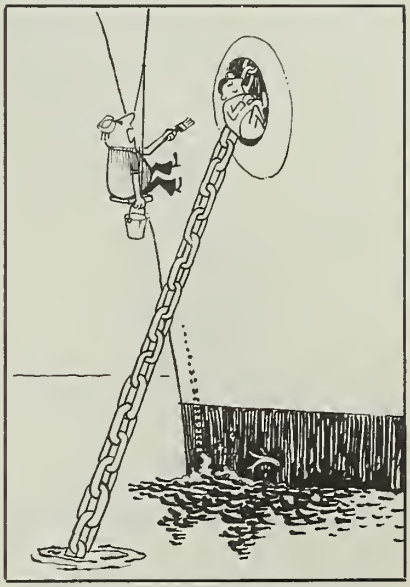
Registration–Permanent where required. Apply by FPCA for registration and absentee ballot. Write in margin, "Please mail registration forms."

Election–Federal and state officers and presidential electors. Vote on Constitutional amendments.

Application for ballot–Mail FPCA to county clerk (Election Commissioner in Douglas and Lancaster counties) no earlier than 90 days before election.

Ballot deadline–1000 the Thursday after election day. Must be postmarked before midnight the day before election.

All-Navy Cartoon Contest
Robert J. Benson, DMSA, USN



"Hey boats—remember the yardbird who was missing when we deployed?"

Nevada

Requirements – Residence: Six months in state, 30 days in county, 10 days in precinct. Be registered.

Registration–Permanent for armed forces personnel and their wives. Apply by FPCA for registration and absentee ballot.

Election–Federal and state officers and presidential electors. Vote on Constitutional amendments.

Application for ballot–Mail FPCA, witnessed by commissioned officer, to county clerk.

Ballot deadline – Must arrive before polls close on election day.

New Hampshire

Requirements – Residence: Six months in voting precinct. Name on check list at place of residence.

Registration – Check list corresponds to registration. Your name is placed on list when ballot application is accepted.

Election–Federal, state and county officers and presidential electors. Vote on measures.

Application for ballot–Mail FPCA to Secretary of State, Concord, for "Armed Services Ballot" at any time.

Ballot deadline–Must arrive before polls close on election day.

New Jersey

Requirements – Residence: Six months in state, 60 days in county.

Registration – Permanent if you voted once in four years. Not required of armed forces personnel, their dependents, and veterans in VA hospitals.

Election–Federal and county of-

ficers and presidential electors.

Application for ballot—Mail FPCA to reach county clerk any time.

Ballot deadline — Must arrive before polls close election day.

New Mexico

Requirements — Residence: One year in state, 90 days in county, 30 days in precinct. Be registered.

Registration — Permanent if you voted in last two elections. Registration in advance not required of armed forces personnel and wives.

Election — Federal officers and presidential electors.

Application for ballot—Mail FPCA, witnessed by commissioned officer, to Secretary of State any time after 1 July.

Ballot deadline—In time for Secretary of State to forward to county clerk by noon of day before election.

New York

Requirements — Residence: One year in state, four months in county, city or village, 30 days in election district.

Registration — You are registered when ballot application is accepted.

Election — Federal, state, county and local officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to reach Division for Servicemen's Voting, Office of Secretary of State, Albany, prior to 11th day before election.

Ballot deadline — Must arrive by 1200 on day of election.

North Carolina

Requirements — Residence: One year in state, 30 days in precinct. Read and write State Constitution; be registered.

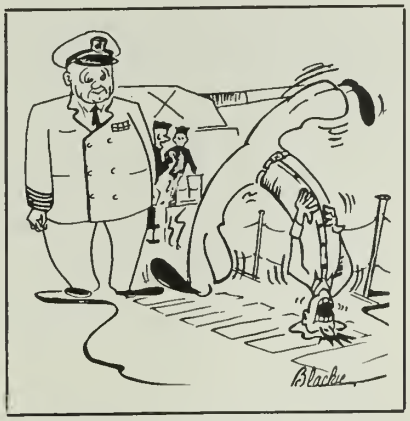
Registration — Permanent except for armed forces personnel on leaving service. Apply by FPCA for registration and absentee ballot.

Election—Federal, state and county officers as well as presidential electors.

Application for ballot—Mail FPCA to Secretary of State, Raleigh, or to chairman, county board of elections, county of residence, any time.

Ballot deadline — Must arrive by 1200 Saturday preceding election.

All-Navy Cartoon Contest
Emmet J. Geisler, YN1, USN



"Thinks he'll make chief if he keeps laughing at the old man's jokes."

North Dakota

Requirements — Residence: One year in state, 90 days in county, 30 days in precinct.

Registration — Not required for servicemen and dependents.

Election — Federal, state, county officers and presidential electors. Vote on proposals.

Application for ballot—Mail FPCA to reach county auditor, county of residence, within the 30-day period before election.

Ballot deadline—Must arrive within one week after election day.

Ohio

Requirements — Residence: One year in state, 40 days in county, 40 days in precinct.

Registration — Permanent if you voted in last two years. Not required of Navymen and their wives when voting by absentee ballot.

Election—Federal, state and county officers and presidential electors. Vote on measures.

Application for ballot—Mail FPCA to reach clerk of county board of elections, county of residence, after 1 January.

Ballot deadline — Must arrive by 1200 on day of election.

Oklahoma

Requirements — Residence: One year in state, six months in county, 30 days in precinct.

Registration — Not required for the armed forces and their wives when voting by absentee ballot.

Election — Federal and state officers and presidential electors.

Application for ballot—Mail FPCA, witnessed by commissioned officer, any time to secretary of county election board.

Ballot deadline — Must arrive by 1700 Friday before election.

Oregon

Requirements — Residence: Six months in state. Read and write English; be registered.

Registration — Not required in advance for servicemen and dependents.

Election—Federal, state and local officers and presidential electors. Vote on referrals.

Application for ballot—Mail FPCA to county clerk or Secretary of State, Salem, within year of election.

Ballot deadline — Must arrive before polls close on election day.

Pennsylvania

Requirements — Residence: One year in state (six months if previously a resident and returned), two months in election district, precinct, or division.

Registration — Permanent if you voted once in the last two years. Not required of servicemen, but required —via FPCA—for dependents.

Election—Federal and state officers and presidential electors.

Application for ballot—Mail FPCA to county board of elections, county of residence, any time.

Ballot deadline — Must arrive by 1000 second Friday after election, but postmarked no later than election day.

Rhode Island

Requirements — Residence: One year in state, six months in town.

Registration — Permanent if you voted once in last five years. Not required of armed forces personnel and their dependents.

Election—Federal, state and local officers and presidential electors.

Application for ballot—Mail FPCA, witnessed by a petty officer or above, to local board of canvassers and registration prior to 21st day before election.

Ballot deadline — Must arrive by 2100 on election day.

South Carolina

Requirements — Residence: One

(Continued on Page 60)

1964 PRIMARY ELECTIONS

State	Date of Primary	To Vote On the Following	Other Primary Elections
Alabama	5 May	To nominate Federal, State and County officers and Presidential Electors; to elect National Committee members and delegates to National Democratic Convention.	2nd or Runoff Primary—2 June
Alaska	11 August	To nominate Federal and State officers.	
Arizona	8 September	To nominate Federal, State and County officers and Presidential electors.	
Arkansas	28 July	To nominate Federal, State and local officers; elect delegates and alternates to National Convention.	2nd or Runoff Primary—11 August
California	2 June	To nominate Federal and State officers; elect delegates to party national conventions and local officers.	
Colorado	8 September	To nominate Federal, State and local officers.	
Connecticut	Varies		
Delaware	15 August	To nominate county candidates.	
District of Columbia	5 May	To elect delegates to National Conventions and officers and members of the D. C. committees of political parties.	
Florida	5 May	To nominate Federal, State and local officers.	Presidential Primary and 2nd or runoff Primary—26 May
Georgia	9 September	To nominate Federal, State and local officers.	
Hawaii	3 October	To nominate Federal, State and local officers.	
Idaho	4 August	To nominate Federal, State and local officers.	
Illinois	14 April	To express party sentiment for President and Vice President; to nominate Federal, State and local officers; to elect delegates and alternates to National Conventions; Representative Committeeman and various judges.	
Indiana	5 May	To express preference for Presidential nominee and elect delegates to State Conventions; nominate Federal, State and local officers.	
Iowa	1 June	To nominate Federal, State and local officers; elect delegates to County Conventions.	
Kansas	4 August	To nominate Federal, State and local officers.	
Kentucky	26 May	To nominate Federal and local officers.	
Louisiana	25 July	To nominate Federal, State and local officers.	2nd or runoff primary—29 August
Maine	15 June	To nominate Federal, State and local officers.	
Maryland	19 May	To express preference for Presidential nominee; elect delegates to State conventions; nominate Federal officers.	
Massachusetts	28 April	To elect delegates and alternates to National Conventions, State Committees, Ward and Town Committees.	15 September (may change)—to nominate Federal, State and local officers.
Michigan	4 August	To nominate Federal, State and local officers; elect delegates to County Conventions.	
Minnesota	8 September	To nominate Federal, State and local officers.	
Mississippi	1 September	To nominate Presidential electors.	2 June—Nominate Federal, State and local officers. 23 June—2nd or runoff primary.

1964 PRIMARY ELECTIONS

State	Date of Primary	To Vote On the Following	Other Primary Elections
Missouri	4 August	To nominate Federal, State and local officers.	
Montana	2 June	To nominate Federal, State and local officers; to elect Committeeman and Committeewoman in each precinct.	
Nebraska	12 May	To elect District Delegates and Alternate District Delegates to National Conventions; to nominate Federal, State and local officers.	
Nevada	1 September	To nominate Federal, State and other officers.	
New Hampshire	10 March	To elect Delegates and Alternates to National Conventions.	8 September—Nominate Federal, State and local officers.
New Jersey	21 April	To nominate Federal and County officers; elect delegates and alternates to National Conventions.	
New Mexico	5 May	To nominate Federal, State and County officers.	
New York	Date to be set.	To nominate Federal State and local officers; to elect Delegates to National and State and Judicial District Conventions, and members of State and County committees.	
North Carolina	30 May	To nominate Federal, State and local officers.	2nd or runoff primary—27 June
North Dakota	30 June	To nominate Federal, State and local officers.	
Ohio	5 May	To elect Delegates and Alternates to National Conventions; to nominate Federal, State and local officers.	
Oklahoma	5 May	To nominate Federal and State officers.	2nd or runoff primary—26 May
Oregon	15 May	To nominate Federal, State and local officers and National and precinct Committeemen and Committeewomen.	Special election—15 May
Pennsylvania	28 April	To express preference for Presidential nominee; nominate Federal and State officers; elect delegates and alternates to National Conventions; members of State and County committees.	
Rhode Island	15 September	To nominate Federal, State and local officers.	
South Carolina	9 June	To nominate Federal and State officers.	2nd or runoff primary—23 June
South Dakota	2 June	To elect Delegates and Alternates to National Conventions, National Committeeman and National Committeewoman, Delegates to State Conventions and members of State Committees.	
Tennessee	6 August	To nominate Federal and State officers; elect Sheriffs and Constables.	
Texas	2 May	To nominate Presidential electors; Federal, State and local officers.	2nd or runoff primary—6 June
Utah	11 August	To nominate Federal, State and local officers.	
Vermont	8 September	To nominate Federal, State and local officers.	
Virginia	14 July	To nominate Federal officers.	2nd or runoff primary—18 August
Washington	15 September	To nominate Federal, State and local officers.	
West Virginia	12 May	To nominate Federal, State and local officers.	
Wisconsin	7 April	To elect delegates to National Conventions, members of the judiciary.	Nominate Federal, State and local officers—8 September
Wyoming	18 August	To nominate Federal and State officers.	

year in state, six months in county, three months in polling precinct. Read and write State Constitution or own $300 in property with taxes paid. Must be registered.

Registration — Request "Registration Card" from Board of Registration, county of residence, any time. Return to Board at least 30 days before election.

Election—Federal and state officers and presidential electors.

Application for ballot—Mail FPCA any time to Board of Registration or Secretary of State, Columbia.

Ballot deadline — Must arrive before polls close on election day.

South Dakota

Requirements — Residence: Five years in United States, one year in state, 90 days in county, 30 days in precinct. Be registered.

Registration — Permanent if you voted in last general election. Mail FPCA for registration and absentee ballot to reach Registration Board, place of residence, prior to 20 days before election.

Election—Federal, state and county officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA, witnessed by a commissioned officer, to county auditor, county of residence, any time.

Ballot deadline — Must arrive before polls close on election day.

Tennessee

Requirements — Residence: One year in state, three months in county. Be registered.

Registration — Permanent if you voted in one state election in four years. Apply by FPCA for registration and absentee ballot.

Election—Federal, state and county officers and presidential electors.

Application for ballot—Mail FPCA to election commission, county of residence, between 40 and five days before election.

Ballot deadline — Must arrive before 1000 on election day.

Texas

Requirements — Residence: One year in state, six months in county. Must have paid poll tax before 1 February ($1.50 state and, if required, $.25 county tax) or have exemption certificate.

Registration—No registration, but poll tax receipt and exemption certificate correspond to registration. See your voting officer for details.

Election — Federal, state, county and local officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to county clerk with poll tax receipt or exemption certificate. The recommended time is at least 45 days before date of election.

Ballot deadline — Must arrive by 1300 on election day.

Utah

Requirements — Residence: One year in state, four months in county, 60 days in precinct. Be registered.

Registration — Permanent if you voted in last general election. Automatic when you return voted ballot with executed affidavit on back of envelope.

Election — Federal and state officers and presidential electors.

Application for ballot—Mail FPCA to county clerk within 30 days before election.

Ballot deadline — Must arrive before polls close on election day.

Vermont

Requirements — Residence: One year in state. Take Freeman's Oath and have name on town check list; pay poll tax to vote in annual town meeting.

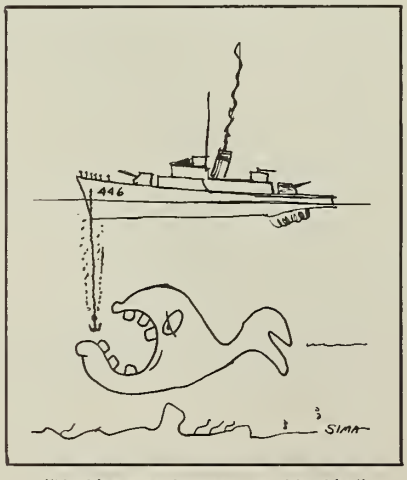
Registration — Voter's check list corresponds to registration. To get on list, take Freeman's Oath in person or by mail on back of ballot envelope.

Election — Federal, state, county and local officers and presidential electors.

Application for ballot—Mail FPCA to town clerk any time.

Ballot deadline—In time to be delivered to election officers before polls close on election day.

All-Navy Cartoon Contest
LT Frederick F. Sima, Jr., USN



"Nothing ever happens on this ship."

Virginia

Requirements — Residence: One year in state, six months in county, 30 days in precinct. Be registered. Poll tax not required of armed forces personnel.

Registration — Not required of members of Armed Forces.

Election — Federal officers and presidential electors.

Application for ballot—Mail FPCA, witnessed by a commissioned officer, to Secretary of State or State Board of Elections, Richmond, any time.

Ballot deadline—In time for delivery to election officials before polls close on election day. (Ballot must be sent registered or certified mail.)

Washington

Requirements — Residence: One year in state, 90 days in county, 30 days in city or voting precinct. Read and write English; be registered. Note: Residence usually refers to period before entering armed forces. Check with your voting officer.

Registration — Permanent if you voted once in the last four years. Apply by FPCA for temporary registration and absentee ballot, or in person for permanent registration.

Election—Federal, state and county officers and presidential electors. Vote on Constitutional amendments.

Application for ballot—Mail FPCA to Secretary of State, Olympia, any time before election.

Ballot deadline—Must arrive within 15 days after general elections; postmarked on or before election day.

West Virginia

Requirements — Residence: One year in state, 60 days in county or municipality. Be registered.

Registration — Permanent if you voted once in period of two primary

or general elections. Request "Application for Absentee Registration" from county clerk of circuit court, county of residence, any time. Return to reach clerk before 30 days before election.

Election—Federal, state and county officers, presidential electors.

Application for ballot—Apply by FPCA to clerk of circuit court, county of residence, to reach clerk no later than the Saturday before election day.

Ballot deadline—In time to be delivered to election officials before polls close on election day.

Wisconsin

Requirements — Residence: One year in state, and a residence of 10 days in election district or precinct.

Registration — Permanent if you voted once in last two years. Not required of armed forces personnel.

Election — Federal, state and county officers and presidential electors. Vote on referendums.

Application for ballot—Mail FPCA any time to county, city, town or village clerk (Board of Elections commissioners, Milwaukee).

Ballot deadline—In time to be delivered to election officials before polls close on election day.

Wyoming

Requirements — Residence: One year in state, 60 days in county, 10 days in voting precinct. Read State Constitution; be registered.

Registration — Permanent if you voted once in last two years. Apply by FPCA for registration and absentee ballot.

Election — Federal and state officials and presidential electors.

Application for ballot—Mail FPCA to county, city or town clerk, place of residence, at least 15 days prior to election.

Ballot deadline — Must arrive in time to be delivered to election officials before polls open election day.

Five New Courses Offered To Enlisted Personnel

Five new enlisted correspondence courses are now available to Navymen. They are: *Boilerman 3 & 2* (NavPers 91512-3), *Aerographer's Mate 3 & 2* (NavPers 91664-2), *Aviation Boatswain's Mate F 1 & C* (NavPers 91680), *Sonarman G 3 & 2* (NavPers 91261-1) Confidential, and *Blueprint Reading & Sketching* (NavPers 91223-3).

The courses have been distributed to appropriate ships and stations for use by Navymen on active duty.

Navy Depositers Will Have An Interest In This Info

It isn't necessary to cut a hole in your pocket if you want to lose money. The Navy Finance Center, Cleveland, knows of an easier way. So easy, in fact, chances are you won't even be aware of a money loss until it's too late to do something about it.

If you have money in Navy Savings, the Finance Center warns that failure to close out your account when reenlisting or extending means that no further interest will accrue on your deposit.

Any time you extend or reenlist you must have your old deposit record book closed and interest computed to the day before the date of reenlistment or extension, and a new account opened.

In recent months a number of Navymen have reenlisted or extended without closing out their old record books. As a result, the savings did not accrue interest during the reenlistments and extensions.

Only after the oversight was discovered, and the Navymen concerned had petitioned the Board for Correction of Naval Records, was corrective action taken.

Such approval by the Board is not automatic, nor is it easy to come by. Therefore, if you have a Navy Savings account and are now serving on a reenlistment or extension, or are planning to extend or reenlist, check with your disbursing office and open up a new record.

WHAT'S IN A NAME

Down South Smoke Eaters

When the alarm clangs at McMurda Sound's Penguin Fire Department, shiny red trucks dan't speed ta the canflagratian and extinguish it with streams af high-pressure water. But then, McMurda's fires aren't like thase elsewhere in the warld.

Destructive fires are never welcame, but in mast places they aren't as patentially disastraus as in Antarctica. The extremely dry air and the high winds af the frazen cantinent cauld leave burned-aut McMurdaites shivering thraugh an isalated winter with shart pravisians and insufficient shelter.

In place af water, the Seabees af the seven-man fire department usually emplay a dry chemical which is carried in 1000- and 2000-paund cantainers an the three vehicles which the department uses in place af fire trucks.



Fartunately far the peaple wha live there, McMurda has mare false alarms than actual fires—nat that anyane is trying ta be funny. The Antarctic huts are kept warm by means af ail heaters and, because af the intense cald autside, quite a bit af heat is needed inside.

In each hut, there is a heat indicatar an the ceiling which autamatically triggers an alarm when the temperature reaches a paint between 120 and 132 degrees.

This sametimes happens in an unventilated hut—and the fire department always respands, even thaugh it may strangly suspect the autamatic alarm is anly crying walf.

If peaple spat a fire before the autamatic alarm daes they dial 333, which rings the phanes at bath the fire department and an the desk af the Juniar Officer af the Day.

As the firefighters rush aut ta extinguish the blaze, the McMurda public address system warns the inhabitants ta remain in their berthing and warking spaces rather than vacate immediately. Rushing unpratected inta the Antarctic cald is decidedly unhealthy.

The smake eating seven naw at McMurda are preparing far their first winter at the battam af the warld. They wark six days a week and have the seventh aff—unless the fire alarm rings.—James R. Price, JO3, USN.

BOOKS

THIS MONTH'S LIST TELLS OF NAVY'S PERILS AND PROGRESS

IF THE NAVY'S problems and progress of the last year were to be summed up briefly, probably no better vehicle could be chosen than **Naval Review, 1964,** edited by Frank Uhlig, Jr.

As Uhlig says in his preface, "No military thought, any more than policies and operations, ought to be exempt from scrutiny, analysis and discussion." With this in mind, contributors this year discuss such wide-ranging subjects as sea power, the consequences of the computer in making basic decisions, the Soviet submarine force, NATO, Southeast Asia, the Navy and Congress, new developments in the practice of warfare, and the future of the enlisted man. Something for everyone, and each article contains enough meat to keep you chewing a long time.

Review gives the over-all picture. Other titles selected for comment this month offer more details over a longer period. **Wings of Neptune,** by Captain Donald Macintyre, RN, tells the story of naval aviation. Although Captain Macintyre was a pilot in the Fleet Air Arm of the Royal Navy, he attempts—and succeeds in giving—a world-wide picture through the years. Beginning with planes against Zeppelins in World War I, he deftly leads the reader through the development of aircraft carriers and the pioneer efforts of Britain in deck landing and aircraft operations at sea. Then, as he says, in 1922 the first U. S. aircraft carrier was commissioned; with Japan following one year later. He describes the pre-war buildup by Japan and recovery of world leadership by the United States during World War II. The resultant great carrier battles form the climax of the book. Should be of considerable interest to anyone connected with naval aviation.

Both *Review* and *Wings* serve as excellent vehicles of orientation. So, too, does **Exploring the Secrets of Space,** in another context of course. Written by I. M. Levitt and Dandridge M. Cole, this describes the remarkable scientific breakthroughs that have made man's celestial exploration a reality. Most versions of astronomy are pretty tough going for run-of-the-mill laymen like us, but Levitt and Cole have a different approach which can wind up being extremely exciting. In discussing man's survival in space, for example, they offer several possibilities: Man can take his environment along with him, as in the Mercury project; he can change a hostile environment to a benign one, as he changes the deserts here on earth; he can change, through mutations, the type of astronaut that will go into space; or, to go way out in left field, he can build into his space men devices which will extend the unconscious self-regulatory controls of the body, thus permitting involuntary adaption to a hostile environment. Presented this briefly, the whole thing sounds a little Buck-Rogerish, but the authors present their concepts convincingly.

The three preceding titles find us at mid-sweep of the pendulum—between battles, so to speak. However, as the man says—the battle is the payoff. All this merely serves as a buildup for **Battle at Best** (that's a pun, son), by Brigadier General S. L. A. Marshall, USAR (Ret.). Following his own style of on-the-spot interviews with the troops themselves, General Marshall describes eight critical actions of World War II and the Korean conflict. The flavor can best be described by quoting the general himself: "Those who would understand the true nature of war must begin by understanding man's own nature, in its strength and in its weakness and in the fine balancing of good and evil, compassion amid brutality, hope among ruins and laughter in the middle of death, which gives man his unique capacity for survival." Get the idea?

The other two non-fiction selections this month are entirely different. Both are laid in the Far East, but there the similarity ends. **Birds' Nests in Their Beards'** by William Stevenson, sounds like a far-fetched title, but there is a connection with the story. Stationed in Hong Kong as Far East correspondent of a broadcasting company, Stevenson decided to investigate a weird advertisement for birds' nests (some of them costing $500 apiece!). Instead, he found pirates, British smugglers, communists, intelligence agents, Asian intellectuals and the battle going on in Malaysia and Indonesia. You'll have to find out for yourself how it all turned out, but we'll give you a clue—Stevenson has decided to move to Africa. It's safer.



Is Australia considered to be in the Far East? According to the map it's in the neighborhood, but **Cooper's Creek,** by Alan Moorehead is a long way from *Birds' Nests.* Moorehead describes the down-under counterparts of our Lewis and Clark—Burke and Wills. The time; 100 or so years ago. The place; the interior of Australia, or thereabouts. Burke and Wills had headed a party which had set out to travel the bush for the first time from north to south. They met an incredible and uncharted country of sand, swamp and scrub, unbelievable animals and, for the two leaders, death. When Burke and Wills, with one other of the party, King, finally returned (in exceedingly rough condition) to their base camp at Cooper's Creek after ultimately reaching the sea, they discovered to their horror that the rest of the party had departed for home the preceding day. Moorehead couldn't turn out a dull story if he tried.

We suggest you try to remember the name John Le Carre. You'll probably be hearing more of him. For the moment, he has written **The Spy Who Came In From the Cold,** which has been compared favorably with *The Third Man.* It is a dilly, loaded with suspense.

After going all-out for *Spy,* what can we say further about **Best South Sea Stories?** Not much, except that this volume was edited by A. Grove Day and Carl Stroven and, in our opinion, is much better than most of such collections. The editors have done their best to weed out the 19th century romantic school and have come up with some excellent examples of tight, tough, good writing.

DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ RILEY, HERBERT D., VADM, USN, for service as Director, Joint Staff, of the organization of the Joint Chiefs of Staff, from February 1962 to February 1964. Exercising outstanding professional competence, leadership and acumen in an assignment which embraced the vigorous prosecution of U. S. military policy, as well as involvement in its development, VADM Riley made significant contributions in the advancement and successful accomplishment of national military objectives during this period of recurrent international crises. Of particular note was his brilliant staff work in direct support of the President of the United States; the Secretary of Defense; the Chairman, Joint Chiefs of Staff; the Joint Chiefs of Staff; and the commanders of unified and specified commands during the Cuban confrontation in October 1962.



LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ DUNCAN, ROBERT C., CDR, USN, for service during the period August 1961 to February 1964, as special staff assistant and the principal advisor to the Director of Defense Research and Engineering on matters pertaining to guidance, navigation, and flight control. In addition to conceiving and establishing the annual government guidance symposium, he was instrumental in originating and providing the first series of Department of Defense fiscal and program reviews assessing navigation, guidance, and flight control for all services. His foresight and perseverance have resulted in considerable economic savings to the U. S. Government. Through his keen analyses of weapons systems, he has provided valuable guidance to the military services and industry.

★ HEINZ, LUTHER C., RADM, USN, for service during the period November 1960 to November 1963 as Director, Far East Region, Office of the Assistant Secretary of Defense (International Security Affairs). He worked skillfully and effectively with his counterparts and seniors in the Department of State, Agency for International Development, the White House and other elements in the Department of Defense to insure that United States politico-military policies in the Far East were properly planned and implemented. RADM Heinz was particularly effective with those elements in the Congress responsible for the Foreign Assistance Program. This effectiveness resulted mainly from his command of the wide range of facts and complex relationships between the various parts of foreign assistance and his ability to express and defend Executive Branch positions on this program. During his tour he was instrumental in reorienting United States programs in Southeast Asia so that they met more effectively the threat of Communist inspired insurgency.

★ SAMPSON, Jesse E., LCDR, USN, for outstanding service during a period in 1963 while serving as commanding officer of USS *Thornback* (SS 418). Exercising marked professional skill, sound leadership, and keen foresight, LCDR Sampson planned for and successfully carried out a complex, difficult and important independent submarine operation, achieving results of great value to the government of the United States. His meticulous and diligent preparation, and his careful documentation and analysis of information, were important contributions to the success achieved.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ GRIFFIN, Gerald C., LT, MC, USN, posthumously, for heroic conduct while serving as a Naval Flight Surgeon aboard a U. S. Marine Corps helicopter which crashed and burned on a densely wooded mountain ridge while en route to an Army of the Republic of Vietnam command post on 6 Oct 1962. As one of five survivors of the initial crash and subsequent fire, LT Griffin, although sustaining serious injuries from which he later succumbed, immediately concerned himself with the condition of his squadron mates, lending them medical advice and words of encouragement throughout a five-hour wait for rescue personnel. When a doctor and corpsman arrived by helicopter, LT Griffin steadfastly refused medical assistance for himself until the other survivors were cared for. During this period he aided the medical rescue team with his professional and technical knowledge.

★ SOWERS, LARRY D., AN, USN, for heroic conduct on the night of 15 Aug 1963 while serving as a member of the flight deck catapult crew on board USS *Saratoga* (CVA 60) in the Mediterranean Sea off the coast of Sardinia. When an aircraft landed and crashed into other planes parked abaft the island on the flight deck of *Saratoga* during night flight operations, resulting in immediate explosions and intense fires, Sowers repeatedly entered the areas of extreme danger to remove burned or injured personnel to safety. Despite the intensity and fury of burning aircraft, explosions and detonation of live ammunition, he continued in his efforts until he was so severely burned that it was necessary to order him to leave the scene of the fire and obtain medical treatment. Through his outstanding courage and perseverance in the face of extreme personal danger, he was directly instrumental in saving several lives.



BRONZE STAR MEDAL

"For heroic or meritorious achievement or service during military operations . . ."

★ HOCH, Wesley A., LT, USN, for meritorious achievement during the period 20 Feb to 20 Jul 1963 while serving with the Navy Section, Military Assistance Advisory Group, Vietnam, as Advisor to the Vietnamese Fourth Naval District/Fourth Junk Force Coastal District with headquarters at An Thoi, Phu-Quoc Island, Gulf of Siam. During this period, LT Hoch exercised outstanding leadership and professional competence in inspiring and assisting his Vietnamese counterpart in the operation and administration of seven junk divisions and varying numbers of Sea Force ships assigned area support, resulting in the establishment of firm governmental control over selected areas and the denial to the Viet Cong of the use of islands of the Gulf of Siam as effective bases of operation. Through his unusual tact, resourcefulness, and desire to excel in all phases of his advisory duties, LT Hoch has made an immeasurable contribution to the American effort within Vietnam.

TAFFRAIL TALK

IT WAS FITTING that the Navy's only seaman-to-four-star-admiral should pass along some fatherly advice and encouragement upon the occasion of the first big step in his son's Navy career. He was about to receive his commission. Fortunately for about 1000 other new ensigns, who were also to benefit from the reflections of a 40-year naval career, the occasion was made public.

James Ricketts was graduating with Class 64-3 from Officer Candidate School at Newport, and his father, Admiral Claude V. Ricketts, USN, Vice Chief of Naval Operations, was the guest speaker.

ADM Ricketts' naval career began at the bottom of the ladder—in boot camp as a seaman apprentice. There his enthusiasm for study so impressed the drill officer that he ultimately was sent through the Naval Preparatory School, where he won an appointment to the Naval Academy.

Answering some questions he posed early in the graduation address, ADM Ricketts described what qualities he thought were most important to a Navy officer. We think John Paul Jones would have heartily applauded the admiral's address, from which we quote the following excerpts:

Regardless of the importance of scientific achievement, the prime ingredient of our profession is the same as it has always been and always will be—the human being—the individual.

Like most professions, what you get from the Navy, what you contribute to it, will depend largely upon your own efforts.

The naval officer must be a leader. He must combine tact, patience, justice and tolerance to a remarkable degree. He must have the confidence and respect of his men.

A naval officer must possess a high degree of physical stamina. Duty at sea and on shore is rigorous.

A naval officer must be thoroughly devoted to his country. He must have the strong conviction that he is contributing greatly to the security of his country.

As you embark upon your duties, I suggest that you absorb the experiences of every day, and take advantage of opportunities to add to your knowledge. However, I advise expanding your thinking beyond your immediate assignment.

You will find your naval profession an interesting and enjoyable one. I must warn you that not all is glamour. There will be times when you may feel submerged in a big organization. You may feel that you, as an individual, are unnoticed. Don't be misled.

No capable man who is conscientious, willing, and industrious will remain unnoticed for long. The outstanding man is too precious a quantity to be disregarded.

Your career will be unusual if it does not include disappointments and frustrations. Don't let them discourage you. One of the standards by which men are measured is the extent to which they overcome adversity.

Coming from a man as successful and experienced as ADM Ricketts, we think that's pretty valuable advice for any Navyman, of whatever rank or rate.

The All Hands Staff

The United States Navy

Guardian of our Country

The United Stotes Novy is respansible for maintoining control af the seo and is o ready force on watch ot home ond overseos, capable af strang action ta preserve the peoce or of instont offensive ootion to win in wor.

It is upon the maintenonce of this cantrol that our cauntry's gloriaus future depends. The United Stotes Novy exists to moke it so.

We Serve with Honor

Tradition, volor ond victory ore the Novy's heritoge from the post. To these moy be odded dedicotion, discipline ond vigilonce os the wotchwards af the present ond future. At hame or an distont stations, we serve with pride, confident in the respect of our country, aur shipmates, ond our fomilies. Our responsibilities sober us; our odversities strengthen us.

Service to God ond Country is our speciol privilege. We serve with honor.

The Future of the Navy

The Novy will olways employ new weopons, new techniques ond greater power to protect ond defend the United Stotes on the seo, under the sea, ond in the oir.

Now and in the future, contral of the seo gives the United Stotes her greotest advontoge for the maintenonce of peoce ond for victory in wor. Mobility, surprise, dispersol ond offensive power ore the keynotes of the new Novy. The roots of the Novy lie in o strong belief in the future, in continued dedicotion to our tosks, ond in reflection on our heritoge from the post.

Never hove our opportunities ond our responsibilities been greoter.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if passible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington 25, D. C.

• **AT RIGHT:** READY TO GO—"Hot Suit" crew members stond by in their protective clothing as o Crusader comes in far o londing on the flight deck of USS Corol Seo (CVA 43) during operotions in the Pocific.



A NAVY TRADITION...









...GOOD NEIGHBORS

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

MAY 25 1964
SOCIAL SCIENCES



in this issue

THE MAKING OF A NAVAL AVIATOR

This magazine is intended for 10 readers. All should ... it as soon as possible. ...COPY ALONG

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MAY 1964



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

MAY 1964 Nav-Pers-O NUMBER 568

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The Chief of Naval Personnel

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Assistant Chief for Morale Services

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• **FRONT COVER: EVENING SCENE** — Long shadows trace patterns across carrier's flight deck as an A-4B Skyhawk taxis out of its deck spot and makes ready for a pre-dusk launching during air operations in the Pacific.

• **INSIDE FRONT:** ONE AND ONLY — Roseann Parent, SA, USNR, became a member of Surface Division 1-13 at U. S. Naval Reserve Training Center, Fall River, Mass., and found she had 157 shipmates—all male. By the looks on their faces, everybody seems happy. More Waves are planning to join the drilling unit of the Navy's civilian component, training in administrative billets.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.

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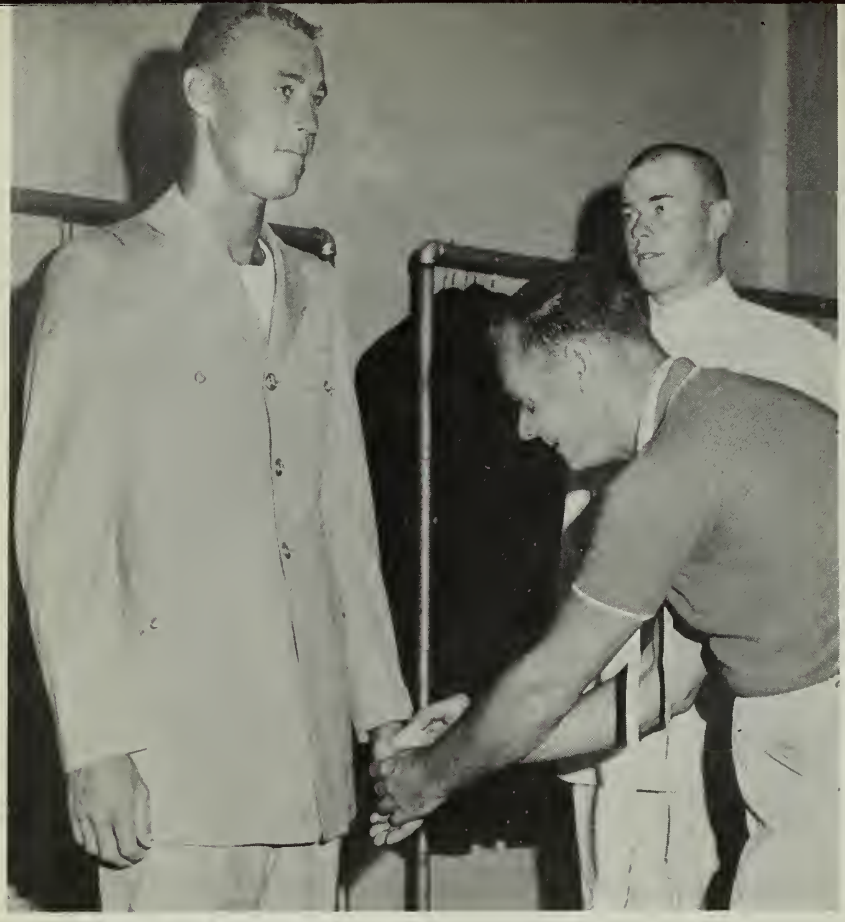
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SUITS ME — NavCad is fitted to uniform after entering pre-flight.

PENSACOLA PRE-FLIGHT

The Making of a Naval

INDOC IS A RED brick building with a large white southern-style porch. Surrounded by shrubbery, it stands across the street from the Acey-Deucy Club at NAS Pensacola. A sign over each door plainly states that visitors are not welcome.

This is where the prospective naval aviator begins to learn his trade.

Students arrive on Wednesdays: College boys in civvies with cocky grins. They make the classic mistakes. Some bring golf clubs, extra civilian clothes, or electric razors. Occasionally one of the new Navymen will ask his parents or friends to wait outside while he "goes in to look around." But it can be a long wait. Cadets cross the Indoc quarterdeck only once.

Some students are a little quieter than average. They are usually enlisted men who come into the flight school from Fleet duty. They're not quite sure what to expect either, but experience tells them it'll be no picnic.

Training begins immediately. Before he has a chance to orient himself, the student receives an explicit explanation of the command "attention." If he's unlucky, he may also learn that the railroad tracks on the tall Marine's collar mean captain, and that captains rate a brace and, when addressed, a "sir" tacked onto every sentence.

It's going to be a rough 10 days. Indoc is boot camp, condensed to a week and a half, with very little left out. Unofficially it's known as the shock treatment.

The stress on discipline during the Indoc periods, however, is far from senseless hazing. The no-nonsense attitude acquired by the student during the first 10 days of training will probably be his most important asset throughout the 18 months of flight school, not to mention his entire career as an aviator.

After completing indoctrination, the student is ready to go on to the school of pre-flight which, like Indoc, is a part of the Naval Air Basic Training Command. By this time, the man's memories of civilian life have become hazy recollections of a distant world. His civvies have been sent home and he has been issued an officer's uniform, complete except for the gold ensign's band on the sleeve. The gold braid he must earn on his own.

IT WOULD SEEM logical that pilot training should be conducted in the air. But the flight students, eager for their first ride in a Navy plane, soon learn patience. There is a saying at pre-flight school, "The feel of a desk precedes the feel of a cockpit." During the first 17 weeks, students conduct their studies on the ground.

There are two reasons for this. In the first place, aviators are primarily officers: Pre-flight is an officer candidate school tailored especially for the aviation officer. Second, the training command long ago learned that hours of study pay dividends in the air.

Pre-flight students fall into several categories. The AOC, aviation officer candidate, is a college graduate who will receive his commission at the completion of pre-flight school. The NavCads and MarCads, on the other hand, are Navymen and Marines who have completed at least two years of college and who will receive their commissions when they are designated naval aviators. In addition, commissioned officers who have been chosen from the Fleet undergo a shortened curriculum at pre-flight before beginning airborne flight training.

Pre-flight school, which includes indoctrination, is a long 16 weeks. After Indoc, the flight students move into one of the three battalion buildings and stow their gear. Reveille comes at 0515; the first classes about 0700. Knock off ship's work is at 1605 and is followed, after evening chow, by a two-hour enforced study period. Taps is at 2130.

BEFORE GRADUATING from pre-flight, the students must complete about 450 class hours. Because this allows little time for haphazard study habits, among the first classes are lessons on study skills, designed to

teach the principles of rapid reading and comprehension.

Math and physics, the major part of aviation science studies, are considered by most students as the largest pre-flight hurdle. Although a student with only an eighth-grade background can, in theory, complete the math course with special help, it's not easy. As for physics, the students receive lectures on force, motion, Newton's laws, gravity, hydraulics, centrifugal force, gyroscopic principles, heat transmission, Bernoulli's principle, sound, static and dynamic electricity, Ohm's law and electromagnetic induction. The AOC with a math or engineering degree is a lucky student.

Other classes include elementary physiology, practical aviation physiology, engineering, navigation and naval orientation.

Between academic periods the students engage in the basic training physical fitness program—which includes bail-out procedures, as well as swimming classes and survival lessons. Survival students learn to make traps, recognize edible plants, ani-

Aviator

mals and insects, and provide shelter with makeshift materials. The man who pays attention to his instructor—and most do—can survive several days in an arctic climate with no more equipment than flight clothes, a parachute, matches, knife and a candle.

ALTHOUGH the emphasis on discipline lessens slightly after indoctrination, the flight students are expected to toe the mark throughout the course. Demerits, which can mean extra duty or expulsion, are handed out for the slightest infraction of the rules. One Navy lieutenant said he would "not think twice before placing a cadet on report." Yet, despite the standards, many students complete the entire 18 month flight training without receiving a single demerit.

Leadership qualities and military bearing are important, and students are assigned an OLQ (officer-like quality) grade several times during their training. Among other things, this grade is the basis for the ap-



EYE TO THE SKY — Flight student looks aloft in contemplation of day he'll fly. *Below:* Future flyers get lesson in aerodynamics during pre-flight classes.







SKY HIGH — Student practices maneuvers in trainer and *(rt.)* helicopter student gets the feel of his bird.

pointment of class officers.

The liberty situation improves slightly as the student progresses through pre-flight, though it could never be considered good by Fleet standards. Indoc students are allowed no time ashore, but on the second Sunday those who qualify academically may rate afternoon and evening liberty. Weekend liberty is authorized after about the third week, but the gate is closed Mondays through Thursdays until the last week of pre-flight.

During the last few days in battalion, each class is taken on a three-day survival trip to nearby Eglin Air Force Base Reservation. As a test of their ability, the men carry only essential equipment, such as compasses, knives and maps (food is not essential). Although they are accompanied by an instructor, the students are expected to provide for themselves. Available edibles include opossum, raccoon and rattlesnake steaks.

A day or two after surviving the Eglin trip, the class gathers on Pensacola's parade ground for pre-flight graduation ceremonies. After a few short speeches and an inspection the AOCs are given their commissions and the students return to their rooms, where they pack for the short trip to nearby Saufley field.

NATC Is Navy's Second Largest Source of Officers

The Naval Air Training Command, with headquarters at Pensacola, is responsible for the commissioning of more officers than any other training facility in the Navy, with the exception of the Officer Candidate School. Its graduates even outnumber those from the Naval Academy and the NROTC programs.

Each year over 2000 noncommissioned students enter the pipeline at the Basic Training Indoctrination Battalion and begin aviation training. Of the pilot trainees, about 600 are Aviation Officer Candidates (college graduates who receive their commissions at the end of the 16-week pre-flight training and continue through the school as officers); over 550 are NavCads, who are commissioned when they earn their wings.

About 900 students per year train to become Naval Aviation Observers, who are not pilots but who may serve in a flying status. Of these, about 550 are Naval Aviation Officer Candidates who are college grads and who, like the AOCs, receive their commissions after completing pre-flight. The remaining 250 are Officer Candidate Airmen who will receive their commissions when they complete training.

In addition, about 850 commissioned officers enter aviation programs annually, bringing the total to about 2750 students.

There are currently over 17,000 commissioned pilots in the Navy.

THE FIRST WEEK of Saufley is, as usual, spent at a desk. But here the courses are less abstract, and instruction centers around flight procedures and the anatomy of the little T-34 *Mentor* in which they will solo.

They are also introduced to the T-34B cockpit familiarization trainer, a mock-up of the *Mentor* cockpit. While at Saufley the students will spend their extra minutes in the trainer until they can find the switches and controls blindfolded. Throughout their careers they will repeat this procedure each time they check out in a new aircraft.

One week after graduation from pre-flight, the young aviators are transferred to Saufley's Training Squadron One. They then receive their initial hop in one of the orange *Mentors* which line the apron outside operations.

By the time the student's first flight is scheduled he knows—at least technically—how to fly the T-34. Watched closely by his instructor, he checks the aircraft's yellow sheets and pre-flights his plane. The student pilot then climbs into the front cockpit. The instructor takes his place in the after seat, out of view of the trainee.

It is the student's duty to start the engine. After a normal period of stalling while he tries to remember everything he has been taught, he pushes the proper buttons and flips the necessary switches, just as he did in the trainer. This time, however, the engine coughs and the prop





LAUNCH TIME — Aviation cadet readies for blast from cat. *Below:* Pre-flight school building at NAS, Pensacola.

turns. The plane captain gives the thumbs-up signal and the *Mentor* taxis down the flight line toward the end of the runway.

DURING THE familiarization flight the student is allowed to test the controls and learn the feel of the air. Back on deck, he who has completed his first flight rates a little added status. He is even allowed to make a little noise in the club—but not much, since a nearby student may have already flown solo.

The trainees make 12 hops in the *Mentor* before solo. The first 11 are familiarization flights, the 12th is a pre-solo checkout given by an instructor other than the student's own. If the instructor gives the traditional thumbs-up after landing, the 13th is solo.

Training goes on at Saufley even when the field is socked in. When the flight schedule is canceled due to weather, the men practice in the familiarization cockpit, check out once more in the bail-out trainer, or catch up on studies.

After solo, the syllabus calls for 10 precision flights in which the pilot learns a few of the finer points of flying. During this period he practices acrobatic maneuvers with emphasis on precision flying in basic air work and—especially important to Navy pilots—landing.

As the eight-week primary flight course nears its end, the students are expected to make a choice between jets and props. This is the first of several such choices they will make as they progress along the Naval Air Training pipeline. After leaving Saufley the class splits up; the men chosen for prop training go to NAAS Whiting Field at Milton, Fla.; and the jet students leave for NAAS Meridian, Miss.

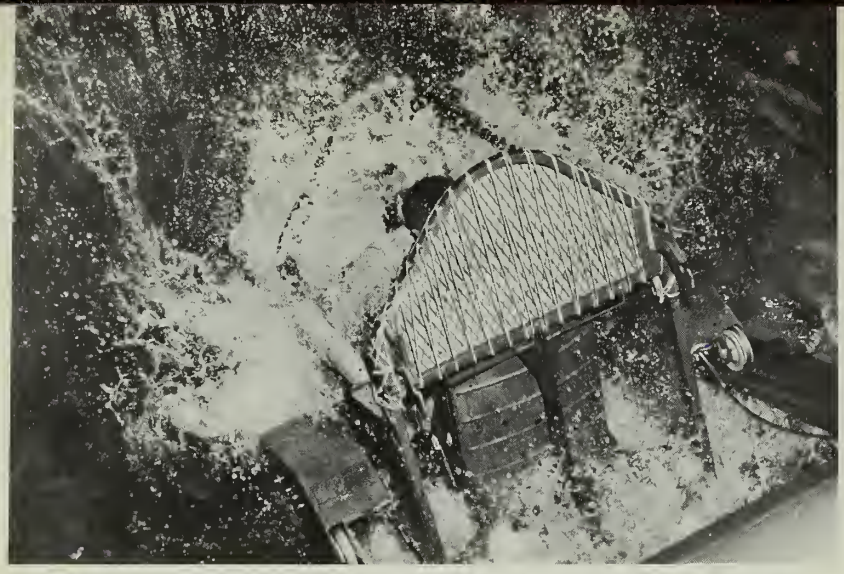
DURING THE 20-week syllabus at Meridian, the jet pilots spend half of each day flying the two-seat T-2A *Buckeye* and the remaining time in the classroom. Then the students report back to NAS Pensacola, where they will receive instruction in the final two phases of basic jet training: Air to air gunnery and carrier qualification aboard the "16 boat," USS *Lexington*.

Before landing aboard the carrier the student pilot must make field carrier practice landings on a simulated carrier deck painted on one of



UP THE CREEK — Training for prospective pilots includes survival course.





IN TRAINING—Dilbert Dunker teaches student escape from crash at sea

the outlying fields. For the most part. these field carrier landings are comparable to the real thing (the mirror and landing signal officer system is used) with one exception: The field does not bounce around as much as carriers have been known to do.

After successfully demonstrating his proficiency in the field carrier landing pattern, the pilot makes two touch-and-go and four arrested landings on *Lexington*. He is then carrier qualified.

The student, by this time, is well on his way to receiving his wings. He is then transferred to NAAS Kingsville or NAS Corpus Christi, for advanced training in jet aircraft. Now he is allowed to fly a hotter plane and will study—both on the ground and in the air—the problems of high-speed and supersonic flight. The final phase of advanced jet training is given in the supersonic F-11A *Tiger*. After transition to this fighter, the students receive training in high-altitude and high-speed jet tactics, air to air gunnery, and the *Sidewinder* air to air missile.

MEANWHILE, back at Saufley, the prop student receives orders to NAAS Whiting Field for training in the T-28 *Trojan* with Training Squadron Two. Transition to the T-28 is a big step: The *Mentor* is a light aircraft with comparatively little horsepower, while the *Trojan* is equal to, or surpasses, many World War II fighters in performance.

While with VT 2 the student completes 11 week of precision, acrobatic, basic instrument and night flight training. He then moves on to VT 3, also at Whiting, where he studies radio instruments, formation tactics, air to air gunnery and day and night navigation.

After leaving Whiting Field the prop pilots report back to Saufley, where they qualify aboard *Lexington*. Then the prop class again splits up and the students go their separate ways along the pipeline. They may choose between advanced training in single-engine or multi-engine props, patrol planes, and helicopters.

Advanced training for prop pilots involves the same basic routine as jet training. The students are gradually staged into more and more complex aircraft until, upon graduation, they have qualified in the type of aircraft which they will fly when ordered to the Fleet.

Helo students follow the prop training through basic and, after qualifying aboard the carrier, report to Whiting Field's Training Squadron Six. Here, before they can begin helo flying, they receive training in the twin-engine TC 45J. While in VT 6 they learn basic instruments, radio instruments, and the basics of cross-country flying, skills which are important to the helo pilot as well as the fixed-wing aviator. After completion of training at Whiting, they transfer to Helicopter Training Squadron Eight at Ellyson Field, Fla., where they receive their final training in helicopters.

Regardless of his path through training, the big moment for every student comes about 18 months after that first day at indoctrination. The student's wings are pinned on by his mother or best girl, and the NavCad receives his commission before being ordered to duty as an official U. S. Navy brownshoe.

But, ironically, the orders usually read, "for further training in a Fleet command." —Jon Franklin, JO2, USN

HAPPY DAYS — Quartette of students discuss day's lesson as they walk down the flight line with instructor.





SKY SAILORS — Student pilots execute maneuvers in skies over the historic lighthouse at Pensacola, Florida.

Pensacola, Here We Come

ON JANUARY 20, 1914, the battleship USS *Mississippi* (BB 23) and the collier USS *Orion* steamed into Pensacola Bay from Annapolis with almost all of the Navy's small aviation strength embarked. The ships dropped anchor near what is now the center of naval air training.

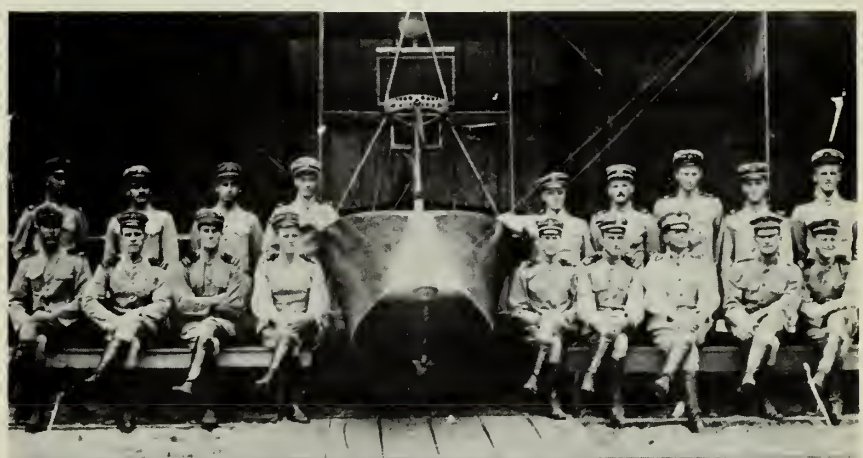
The situation probably looked bleak to the officers and enlisted men of the unit as they unloaded seven airplanes and a few spare parts to begin training activities. The cluttered beaches of the old Pensacola Navy Yard showed little promise of what would come.

Lieutenant Commander Henry C. Mustin (naval aviator number 11) and Lieutenant John H. Towers (naval aviator number three) directed the offloading of tents, airplanes and equipment. Towers had orders to take charge and establish a flight school, while Mustin, CO of *Mississipi*, was to assume additional duties as officer-in-charge of the Naval Aeronautical Station.

On that winter day, naval air training at NAS Pensacola began the long struggle through war, depression and public doubt.

The first flight for the new station was logged on 2 Feb 1914—a 20-minute journey over the naval reservation and Bayou Grande. Lieutenant Towers and Ensign Godfrey Chevalier (naval aviator number seven) made the historic initial launch.

Even before a formal course of training for the new flight school was approved, Lieutenant Towers, with three aircraft, three pilots and 12 enlisted men was sent to Tampico, Mexico, aboard USS *Birmingham* (CL 2) to conduct observation



FIRST CLASS in flight training at Pensacola poses for its graduation photo. **LEFT TO RT: Back: Paunack, Spencer, Bartlett, Edwards, Branson, Corry, Norfleet, McDonnell, Scofield. SITTING: Soufley, Bellinger, Whiting, Mustin (first CO at NAS Pensacola), Read, Johnson, Cunningham, Evans, and Haas.**





EARLY BIRDS — JN *Jennies* flew out of Pensacola in the '20s. *Rt:* F-5L seaplane is shown at air station in 1919.

flights. A day later, on 21 April, *Mississippi* left for Vera Cruz with Lieutenant (jg) P. N. L. Bellinger (naval aviator number eight), three student pilots and two more planes.

WHEN WORLD 1 began in Europe, *Mississippi* was sold to Greece and the armored cruiser USS *North Carolina* became the station's aeronautical ship. She had barely begun her duties when she too was sent to Europe with Mustin and several aviators still on board. Three of them remained in Europe as aviation observers and assistants to the naval attaches in London, Paris and Berlin.

In April 1917, when the United States entered the war, the combined strength of Naval and Marine Corps aviation was only 48 pilots, 239 enlisted men, 54 airplanes, one airship, three balloons and one air station—Pensacola. By the end of the war Naval Aviation had grown to 6716 officers, 30,693 enlisted men in Navy units, 282 Marine aviators and 2180 enlisted men in Marine units.

After the Armistice naval aviation moved at a much faster pace than it had before the war. During the '20s and '30s more aviators were trained each year than had been on hand in all of Naval Aviation in 1917; patrol aviation expanded; aviation units were assigned to battleships and cruisers; and the first carriers were commissioned.

However, that pace was made to look almost like a walk, compared to the tremendous strides that aviation took during World War II.

Today NAS Pensacola is a 5500-acre training and repair center. The station's wide array of facilities provides support for the entire Pensacola training complex.

NAS Pensacola is headquarters for the Chief of Naval Air Training and the Chief of Naval Air Basic Training. It is also home base for groups such as the Blue Angels and the Chuting Stars.

Mechanics at the station's aircraft maintenance department operate a modern service center for Pensacola's training aircraft, keeping each aircraft in a go status at all times.

Extensive rebuilding and overhauls of aircraft are done at the overhaul and repair department. Aircraft from naval installations along the Atlantic seaboard are shipped to Pensacola, revamped, and placed back in service aboard ships and shore stations.

Bordering Pensacola Bay, NAS Pensacola is the natural candidate for the job of docking and sustaining the training carrier USS *Lexington* (CVS 16). The ship ties up just a few yards from the CNATRA and CNABATRA headquarters.

TENT TOWN—Seaplanes line up on beach two months after station's start.



PENSACOLA is the site of the preflight school, where Navymen report for flight training from colleges



LOOKING GOOD—NAS Pensacola has come a long way since its bleak start as a 'tent city' back in January 1914.

and Fleet activities. Here prospective aviators receive their first taste of naval aviation. Pre-flight's training syllabus includes indoctrination and academics courses covering theory which will be put to practical use later in trainihg. The students also undergo a rigorous physical training program.

The School of Aviation Medicine is another activity at Pensacola. SCOLAVNMED trains Navy doctors and hospital corpsmen for duty with aviation units throughout the Fleet. Flight surgeons, laboratory technicians, flying corpsmen and many other specialists graduate from the school ready to care for the medical needs of aviators around the world. SCOLAVNMED also works closely with NASA to provide training and evaluation facilities for beginning astronauts.

The Naval Air Technical Training Unit, housed in a cluster of buildings above historic old Fort San Carlos de Barrancas, trains Navy photographers in basic theory through advanced aerial work. Photographer's mates holding diplomas from NATTU's schools staff the Navy's photographic squadrons and laboratories.

The Basic Naval Aviation Officers School provides a curriculum of technical courses for the officers interested in aviation but who do not want to be pilots. These officers specialize in navigation, aerial radar or a number of associated aerial specialties.

NAS Pensacola is also the home of the recently opened Naval Aviation Museum, with its array of aviation relics dating back to 1911, birthdate of naval aviation. The museum, where the story of naval aviation is related in pictures and displays, is a major attraction to the thousands of tourists who visit the station each year.

In all, some 20,000 military and civilian personnel work and live aboard the station. From that humble beginning 50 years ago NAS Pensacola has become a modern training ground of the '60s, where Navymen earn their wings.

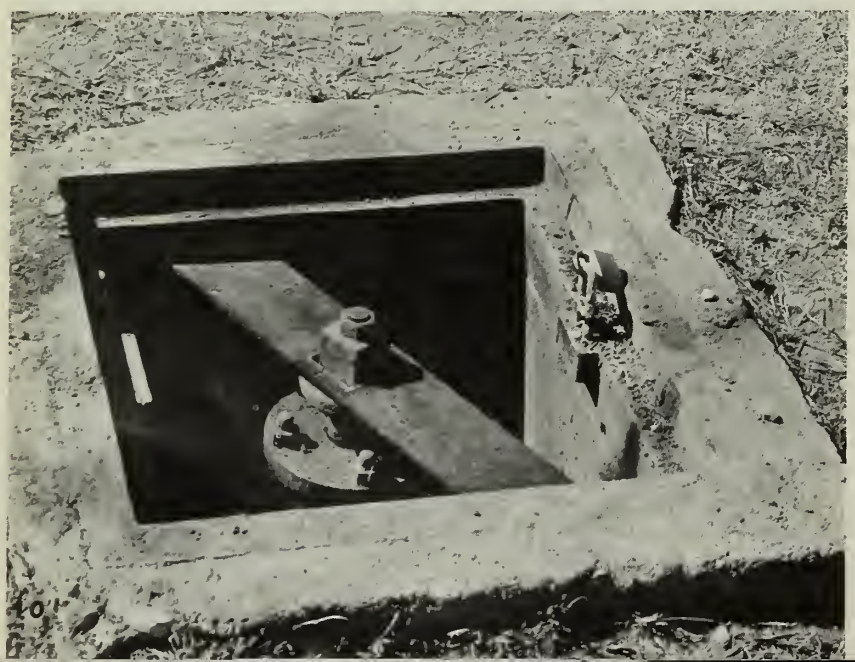
—T. C. Jones, JO2, USN.

BEGINNING—Pensacola Navy Yard looked like this when air group moved in.





END OF THE LINE—Pressure gauge heads for zero after water pipe from Cuba was cut. *Below:* Water valves have been welded shut in this fashion.





DESALTING plant will move to Gitmo.

Report

WHILE TWO MSTS ships continue to supply the Guantanamo Naval Base with Florida water, the Navy is proceeding with operations which will make the strategic U. S. installation self-sufficient.

Presidential orders to strengthen the base came as a result of the Cuban water incident, which began last February 6 when the Cuban Government stopped the flow of water from the Yateras River water plant which had supplied Guantanamo Naval Base. The move was allegedly in retaliation for the seizure of four Cuban fishing boats and their crews, caught poaching in U. S. waters.

Water for the Guantanamo base had been provided as a result of an agreement originally made in 1938, re-asserted in 1947 and personally supported by Fidel Castro in 1958. Nevertheless, when the water was secured the U. S. was not taken by surprise.

About an hour after the Cuban government announced its intentions, messages were sent to two MSTS ships which were operating in the Atlantic. According to previously laid plans, the ships were to head for the U. S., where they would take on a load of fresh water





GUNGA DIN—One of Guantanamo's water supply ships, *USNS Tallulah,* helps to shuttle water from Florida to Cuba.

from Guantanamo Bay

and then steam back to Guantanamo.

On the naval base, no one went thirsty. Soon after the water stopped flowing, the base was placed on Water Condition Alfa, with water available during three one-hour periods each day. Gitmo residents broke out paper plates and used salt water for sanitary purposes to conserve the 16,000,000-gallon reserve in the base's storage tanks.

A few days later the first ship arrived with its load of water.

About 10 days after the flow of water was stopped by Cuba, the Guantanamo inhabitants were still feeling the effects. The swimming pool was closed, but the water coolers and laundries were back in operation. Shrubs and plants were being watered regularly.

On the evening of February 7 the White House press secretary announced that the President had ordered the Department of Defense to make the Guantanamo Naval Base self-sufficient.

BUT THE INCIDENT was not yet closed, and about ten days later the Cuban government unofficially accused Guantanamo of taking water from the Yateras River. The U. S. maintained that it had no intention of using Cuban water, and the Commander of the Guantanamo Naval Base ordered the water lines cut to squelch any rumors.

Early on the afternoon of the 17th a crew of Navy employees gathered at a spot a few yards inside the base's northeast gate. While the Cuban military gate guards went about their normal duties, apparently unaware of what was happening nearby, the Navy uncovered and cut the 14-inch water line in the presence of 14 newsmen.

Today, near the site of the excavation, are two water pressure gauges which tell the story. The gauges have registered zero since Cuba cut off the water supply, and they will probably rust in that position. All water pipes leading from Cuba have been severed and sealed,

SIGN ON Naval Base points up situation. *Rt:* Workman torches water pipe.









WATER WORKERS—*USS Abatan* de-salts in Gitmo harbor. *Rt: USS Nespelen* (AOG 55) rushed water from Norfolk.

and the valves have been welded shut.

While the water incident was still making headlines, Navy operations to strengthen Guantanamo were picking up steam.

Water transportation via ship had been a satisfactory emergency measure, but for a permanent supply of water, tankers were too expensive.

A de-salting unit, which produces fresh water from the ocean by methods similar to those used in Navy ships, was available. It was being operated on an experimental basis at Point Loma, Calif.

The plant, which could produce about one-third of the water necessary to support Guantanamo, was subsequently dismantled and is now being shipped to Cuba by sea. It will be reassembled and producing water by August.

Two more plants of the same approximate size were needed and, since no more were available, designs were drawn. The plans were approved in March, and the units will be operating early in 1965.

When the entire installation is complete, it will produce over 2,000,000 gallons of fresh water per day, more than enough to supply the base.

In addition, the installation will generate 11,500 kilowatts of electrical power.



TANKS YOU—MSTS ship *USNS Suamico* (AO 49) is hauling water to Cuban base. *Below:* Reserve water tanks overlook dependents housing area at Gitmo.



COST WAS NOT the obstacle it first seemed. Although water produced by the de-salting method will be more expensive, the electricity will be much cheaper than in the past, balancing the cost considerably.

Labor is another Gitmo-Cuba tie, and the Navy has taken steps to reduce its dependence on Cuba in this area too. Many workers, who have commuted to work through Cuban-controlled gates, now live on the station.

The Cuban employees living on the base now number 500. They have been granted political asylum. It is probable that this work force may be supplemented by hiring workers from Jamaica and, perhaps, by Seabees.

Another step was underway when the water incident began. Some time back the Navy announced that those men ordered to duty at Guantanamo would not be allowed to take their dependents (ALL HANDS, March 1964, p. 46). The women and children now living there will leave when normal tours expire, and by 1966 there will be no more dependents at Guantanamo.

Throughout the incident, as was true in previous crises, the President and the Defense Department emphasized that the U. S. would not abandon the Guantanamo Naval Base any time in the foreseeable future. Aside from its recent political importance, Gitmo is the site of one of the Navy's larger training installations.

Guantanamo Bay, with its mild weather and nearby deep water, will continue to support intensive Navy and Marine training exercises.



BEACHED — Vietnam LST hits beach during exercises with U. S. Navymen.



WELL DONE — CO of *Thi Nai* and MCB officer shake after teaming up on landing. *Below:* Vietnamese and U.S. Navymen secure vehicles on deck.

Training with Vietnam Navy

MUTUAL BENEFIT was gained by personnel in the U.S. Navy and Vietnam Navy during a joint training exercise held at Guam.

The mission of the exercise was to test the capabilities of a U. S. mobile construction battalion and the crew of the Vietnam LST, VNNS *Thi Nai* working as a team to on-load and off-load heavy equipment in an amphibious landing.

On the morning of the exercise a team of Navymen moved 36 pieces of heavy construction equipment to a staging area just outside NS, Guam, and readied them for embarking loading. At exactly 1315 hours VNNS *Thi Nai* hit the beach with doors open and loading ramp ready to drop. Equipment was loaded aboard the main deck and well deck and chained down. U. S. and Vietnamese sailors worked side by side during the entire operation. They found the language difference was no barrier as they readied the ship for departure.

When each piece of machinery was secured in its predetermined and charted position the landing craft backed off the beach and headed for sea. Watches were maintained during the night to keep check on the tie-down and general quarters was sounded during a simulated attack. Just before dawn the ship headed for the beach to off-load men and equipment.

The ship's company, called to GQ, stood ready to withstand any enemy attack and MCB Five personnel disembarked the vehicles under combat conditions. When all the gear and men had been beached *Thi Nai* backed off from the beach and the training exercise was successfully completed.

The photos here illustrate various phases of the operation, ending with smiles and a handshake.



TEAMWORK—Heavy construction equipment is secured on main deck. *Rt:* Shovel is loaded aboard Viet LST.





Skydiving

Because of the considerable interest created by our parachute article in the preceding issue, we decided to investigate the subject further. Here are our findings. You too can participate in skydiving if you really want to.

AS A NECESSITY, parachuting can be a real lifesaver. As a sport, parachuting is safe, thrilling, and knows no season.

It is now permissible as an after-hours activity for Navymen and women of all ratings, provided the jumps are properly planned and supervised, and the sponsoring parachute club abides by the rules and regulations which make skydiving a safe, enjoyable experience.

At last report the list of sport parachute clubs open exclusively to active duty personnel is growing. At last count there were 28 such clubs run by and for Navy and Marine Corps personnel (see box, p. 16).

Many of the tricky skydiving maneuvers performed by Navy's own Chuting Stars on an official exhibition basis are handled with perfection by Navymen who have taken up parachuting as a hobby.

Though skydiving in the U. S. has increased in popularity only recently, it's an old sport. France took up skydiving as a national sporting event in 1949, and formed 10 public parachuting centers throughout the country.

French sport parachutists refined free fall techniques and falling positions, and proved beyond any doubt that a free fall through space can be controlled.

BEFORE THE STABLE BODY positions now popular with skydivers were refined, jumpers tumbled and spun with little or no body control. It was commonly assumed that a jumper would black out during a fall of any duration.

However, as the sport progressed, it was learned that a man can drop thousands of feet in complete control of both body and mind.

Not only can the body be stabil-



GOING DOWN—Navy skydiver free falls, maneuvering on the way down.

Catches On in the Navy

ized during free fall, but controlled loops, turns and rolls can be accomplished by simple manipulation of the arms, legs and torso.

With proper positioning, the skydiver can maneuver like a fighter aircraft.

The rate of fall may be regulated to a certain extent. By assuming a slow fall position, a jumper will drop at approximately 100 mph. By diving in a head down position known as "full delta," speeds up to 185 mph may be reached.

Using a position called maximum track, the diver moves nearly one foot horizontally for each foot of vertical descent.

All this takes considerable practice if it's to be done with grace. An arm or leg raised or lowered at the wrong time can send a jumper out of control.

Newcomers to the sport are always surprised to discover that diving through space does not involve the physical sensation of falling one might expect. Those who have tried it say it's "like floating on a cushion of air."

Basic equipment for the sport parachutist includes a standard 28-foot main chute, modified for steering, plus a 24-foot emergency (reserve) chute. Jump boots, helmet and one-piece aviator type coveralls are other essential items. If jumps are made when the temperature is 40 or below, goggles and gloves are worn.

Like the official Navy parachutist who jumps at a high altitude and must free fall before activating his chute, the sport skydiver carries a stopwatch and altimeter.

Each Navy sport parachutist must abide by rigid training and safety rules, and must maintain a log book in which all his jumps are recorded.

Before any beginner is permitted to jump, he receives ground instruction, goes through the motions of a jump, and practices parachute landing falls by jumping off any five to 10-foot high object. He must also learn various emergency procedures, and the effects of wind velocity.

Evidence of the sporting skill of parachuting is demonstrated by the fact there are five main classes of licensed chutists. After the beginner or novice stage, one may earn the rating of parachutist, jumpmaster, expert and, finally, instructor.

To acquire these ratings the sport parachutist must make a specified number of jumps and execute various maneuvers during free fall, such as passing a baton back and forth with another free falling skydiver.

ADVICE FOR PROSPECTIVE parachute jump hobbyists is provided by the Parachute Club of America which, at last count, had more than 7000 members and more than 400 active clubs, including those run exclusively for military personnel.

PCA directs its efforts toward making parachuting a safe recreational activity that is recognized as a true sport rather than a stunt.

Basic safety regulations, which must be followed by all PCA member clubs, spell out uniform operating procedures which make skydiving a safe sport. Navymen who belong to sport parachute clubs abide by these regulations, and consider the booklet in which they appear as the "skydiving bible."

Navy clubs have their own constitutions and bylaws, and elect their own officers. The only membership restriction requires the prospective sport parachutist to be on active duty.

Before he is permitted to jump, the student must pass an aviation physical examination, and must receive sufficient ground training to enable him to make his first jump knowing exactly what to do.

THE FIRST OFFICIAL word concerning the participation of Navy personnel in sport parachuting was issued in August 1959. Today, SecNav Inst. 1700.6 series spells out what you must do to participate in "competitive and exhibition parachute jumping" (sport parachuting).

You may sport parachute only:

- As a member of a military parachute club sanctioned by the Chief of Naval Operations.
- As a member of an approved civilian parachute club under the jurisdiction of PCA.
- As a student parachutist undergoing training that will qualify you for an international license.

HOME PLATE—Members of Jax Navy Sport Parachute Club study aerial map of Jacksonville, Fla., taken at 25,000 feet, before going aloft for a jump.





BIRDMAN—Members of Pacific Fleet amphibious force have more than 180 members in their club. Here, club member leaves plane to begin free fall.

You must be 21 years of age (or have the written consent of your parents or guardian if over 18 and under 21).

After sufficient ground training, you must make at least five static line jumps, and must successfully pull a dummy ripcord within three seconds on three successive static jumps, all under close supervision, before you make your first free fall.

You may not experiment with wings, cloth extensions or other forms of control surfaces.

Your main chute must be packed by a qualified parachutist, a military rigger, or licensed Federal Aviation Agency rigger. As a sport parachutist you may pack your chute yourself under the close supervision of club members who are qualified.

Once you qualify, and your commanding officer gives you permission, you may participate in any PCA-sanctioned event.

INDIVIDUAL NAVY COMMANDS are authorized to establish sport parachute clubs as desired when a sufficient number of interested personnel are on hand to participate. Such clubs are entirely self-supporting, and membership is strictly voluntary.

Commands which establish such clubs must inform the Deputy Chief of Naval Operations for Air (OP-56), Washington 25, D. C., in accordance with SecNav Inst. 1700.6C, the latest policy directive on the subject.

As of January 1964, 28 Navy and Marine Corps sport parachute clubs had notified CNO of their formation. CNO, in turn, notifies each club of other club locations, and encourages liaison and exchange of ideas. CNO strongly encourages all clubs to keep a close check on constantly changing safety techniques which are published from time to time by PCA.

ON THE SUBJECT of safety, Navy sport parachute clubs are invariably proud of their records. At China Lake, Calif., for example, a recently formed skydiving club comprised of men based at the Naval Air Facility and Air Development Squadron Five, had made more than 100 jumps, mostly by students, and no member had sustained so much as a sprained ankle.

Quantico, Va., is the site of a typical sport parachute club for active duty personnel. Training for interested newcomers is thorough, and the cooperation of veteran club members in helping the new man find his way around the parachute loft, the landing zone and training sites, exemplifies the team spirit that can be found in any Navy parachute club.

In Lakehurst, N. J., 50 Navy and Marine sport parachutists from military clubs met for competition in various events, with trophies going to those who received the most points, based on landing accuracy

Navy and Marine Parachute Clubs

If you're interested in skydiving, and one of the Navy or Marine sport parachute clubs listed below is located in your area, check the word contained in SecNav Inst. 1700.6C for Navy views concerning membership and student training. Note that clubs other than those listed may have been formed and approved by the CNO since this listing was compiled.

CLUB NAME	LOCATION
Quantico Parachute Club	Marine Corps Schools, Quantico, Va.
Navy Lakehurst Parachute Club	Naval Air Technical Training Unit, Lakehurst, N. J.
Kaneohe Marine Skydivers	Kaneohe, Oahu, Hawaii
Tidewater Navy Skydivers	NAS Oceana, Va.
Marine Skydivers Club	MCAS Iwakuni, Japan
Marine Skydivers	Marine Corps Base, Camp Lejeune, N. C.
Navy South Weymouth Skydiving Team	NAS South Weymouth, Mass.
U. S. Navy Skydivers Club	Naval Station, Roosevelt Roads, Puerto Rico
U. S. Marine Skydiving Club	Third Marine Division (Reinf), Okinawa
Navy Memphis Skyhawks	NAS Memphis, Tennessee
Navy North Island Parachute Club	NAS, North Island, San Diego, Calif.
Navy Skydiving Club	Utility Squadron Eight Roosevelt Roads, Puerto Rico
Marine Sport Parachute Club	MCAS, Cherry Point, N. C.
Atsugi Skydivers	NAS Atsugi, Japan
HELASRON 9 Skydivers	Helicopter Antisubmarine Squadron Nine NAS Quonset Point, R. I.
Marine Barracks Parachute Club	NAS, Alameda, Calif. Training Squadron Twenty Four
The Chase Skydivers	NAAS Chase Field, Beeville, Tex.
Cubi Point Skydivers	NAS Cubi Point, Philippines
Parachute Club	NAS Patuxent River, Md.
China Lake Parachute Jump Club	NAF China Lake, Calif.
Jax Navy Sport Parachute Club	NAS Jacksonville, Fla.
AirDevRon Six Sport Parachute Club	NAS Quonset Point, R. I.
Monterey Navy Skydivers Parachute Club	NAF Monterey, Calif.
Sport Parachuting Club (PhibTraPac)	San Diego, Calif. (Naval Amphibious Base, Coronado)
Saufley Field Parachute Club	NAAS Saufley Field, Pensacola, Fla.
Marine Sport Parachute Club	MCAS Beaufort, S. C.
NAS Seattle Parachute Club	NAS Seattle, Wash.
Corpus Christi Skydivers	NAS Corpus Christi, Tex.



HIGH JUMPERS — Members of the Navy's *Chuting Stars* perform some tricky maneuvers while high in the sky.

(hitting the target), form while free falling, and adherence to the split second timing required for chute opening and length of fall.

At NAS Jacksonville, Fla., last September, seven Navy sport parachutists, one of them a Wave, unofficially established two Florida high altitude jump records, and at last report were awaiting the word on a possible national record.

The Wave, Sheila Kavanaugh, RM3, set the woman's state altitude record by jumping from an altitude of 20,764 feet. She reached a speed of 120 mph during a one-minute, 37-second free fall.

A male contingent from the Jax club jumped almost 25,000 feet—another state record. The men fell for two minutes, and were descending at a 180-mph clip before they activated their chutes.

The above experiences make it clear that parachuting is certainly not the death-defying adventure it once was thought to be. Further, sport parachuting is permitted as an after-hours activity for Navymen and women who abide by the rules.

For the first time, parachute competition will be a CISM "military olympics" event this year in France, and Navy parachutists, official and unofficial, will be invited.

However, whatever it's used for, the parachute remains the only means of recovering men and machines from the sky. That is until, as more than one Navy skydiver has suggested, someone comes up with an anti-gravity belt, or reverse thrust rockets.

—Dan Kasperick, JO1, USN

The First Jump—What's It Like?

On occasion, a journalist may become interested in his story above and beyond the call of duty. That's what happened to Dan Kasperick, JO1, USN. While doing his parachute piece as an All Hands *staffer, he began to wonder just what it was like to make such a jump. On his own initiative, and on his own time, he made the necessary contacts, took the required training and physicals and, still on his own time, made the jump described below. Now he* knows *what it's like.*

YOU'RE ABOUT to make your first parachute jump. You're not jumping under emergency conditions. You're jumping because you want to.

You board a helicopter with nine other men. You're the second to the last to enter the cold, cramped passenger compartment. The jumpmaster, a veteran skydiver on whom you'll depend to signal you away at the proper spot in the sky, follows you aboard.

You take the last available seat on the two benches that face each other. Your seat is next to the door. The jumpmaster slides it shut.

As the chopper takes off, you go numb. Your stomach is light. The muscles in your legs quiver. Your knees knock. Your teeth chatter.

It's cold. You recall that the weatherman had said it was close to zero a couple of hours ago.

You look out the tiny window centered between the helmeted heads of two of the five men seated on the bench across from you. You're really living it up now.

That may be, but you're scared. The fear mounts as the chopper climbs. It builds until you think you'll explode, collapse, or both.

What are you doing, and why? You don't have to do it. Let the other guys jump all they want. They've done it plenty of times. Look at them, sitting there so smug and confident.

Maintain composure. You have to do it. So what if you get killed? At least you won't lose face. Your wife, the guys on the job, they'll be mighty disappointed with you if you chicken out now.

Anyway, what could possibly go wrong? You've gone over it a hundred times in your mind. These guys know what they're doing. They've made hundreds of jumps, and not been hurt. They've told you what to do, and you've thought about it so much you feel you've done it for real anyway. So why stop now?

THE JUMPMASTER catches your eye. He's wondering if you're OK. He smiles. Don't let him know you're scared. He might not let you go. You give him one of those "I'd rather fight than switch" smirks, and he gives you thumbs up.

You've been climbing for some time, and now the jumpmaster goes to the door. He holds out his right hand. He wants the hook end of your static line. He's using hand signals, just as the club instructor said he would. You hand him the end of the line you've been holding. You know you're at, or mighty close to, the



2800-foot altitude the club uses for first-time jumpers.

The jumpmaster motions you to turn in your seat and face forward, in the direction the chopper is moving. You know he's secured the hook of your static line, though you can't see exactly where.

The door slides open and a blast of cold air hits you. Don't freeze up, you tell yourself. The jumpmaster is smiling again. He knows you can do it. He has confidence in you. So do the others. They're all pulling for you. You can see it in their faces.

Out goes the hand again, pointing to the two steps that are used for boarding. You sit on the top step, and put your feet on the bottom one. You hang on to the edge of the door with your right hand. The wind and noise are stronger now, but it doesn't matter. You're not scared anymore. No time. Too many things to get right.

The jumpmaster points to the handle secured to the other side of the opening. You reach up and grasp it with your left hand. On signal, you stand on the bottom step, placing your right hand on the big strut running from the chopper's body to one of the wheels. The jumpmaster pokes at your left hand, which he wants you to place on the strut also. You do, and you're all set to shove off.

NOW THE WIND really hits you. The chopper is doing about 100 mph. You stand there a long, long time. Why doesn't he slap me on the leg and let me go, you wonder. Did he slap you, and you didn't feel it? Should you turn your head to look? Maybe they think you froze up. Wait a little longer, then see what's wrong.

You finally feel the slap. It's unmistakable. You pause momentarily, and then push off.

You spread-eagle your arms and throw your head back, just as you were told. At the same time you spread your legs and lock your knees. You know you have a good falling position.

Your body begins arching downward more than you think it should. You tighten your stomach muscles, and sure enough you go into a smooth, firm falling position, just as you've been told you would. Funny how you can maintain your composure—physical and mental—while you're falling for the first time.

You feel a gentle tug, and you know you're sitting in the harness. You look up to check your canopy. It's big. It's orange and white. It's beautiful.

YOU SEE the "T" opening in the rear of the canopy, through which the breezes blow to move you in the horizontal direction of your choosing. You look down and try to spot the strips of cloth the guys had laid on the ground to form a big "X." You can't see it.

You look up again and latch onto the toggle lines dangling above your head. You pull the left line. You spin around to the left, much as you'd do in a swivel chair at the office. Again you look down. You see the target.

You're too high to tell how you should steer. Anyway, it's hard to tell which way the wind's blowing. Relax. Play it cool and enjoy yourself. These few moments are the reason for all the waiting, the red tape, the training and discomfort. You have plenty of time to worry about that target. It may take three or four minutes to reach the ground. Wait until you get a better bearing.

It's quiet. More quiet than you've ever experienced. You can't tell you're falling, though you know you are. You're exhilarated. You want to yell.

"Look at me, world! I'm the greatest!" That's how you feel.

Nice, but better get back to those toggle lines. Don't end up so far off target they'll have to send out a search party to find you.

You're running with the wind. The canopy modification is facing the wind, and the breeze is pushing on through and moving you faster than you expected. You've passed the target and are still going. While you were enjoying yourself you should have been paying attention. Odd, how fast the time went.

You pull your right toggle line to reverse the modification and slow down your horizontal drive. You hear someone on the ground shouting at you through a battery-powered speaker. You can't make out what he's saying, but you know he's trying to tell you what to do with your toggle lines.

MAN, YOU'RE *way* past the target. Look at those trees. You've seen them before on the way to the landing zone. They run along the highway. Here comes a stack of old logs and boulders, but you'll clear it.

You spot a clearing between the trees and other hazards. You've *got* to land in that clearing. You pull the left toggle line and hope the wind will push you into the clearing at just the right moment.

You're going to make it.

Only seconds remain before you'll hit the ground, so you release the lines and slide your hands up the nylon webbing they call the risers. You pull on them, hard, just as you were told. You put your legs together, and look at the horizon. You bend your knees slightly. You assume what you hope is the semi-relaxed position they told you to take.

You hit, and roll. You don't feel a thing. It was a good fall, you know. You stand up and look around. You're shaking. You feel great.

You collapse your chute, which wants to go along with the surface breezes. You're only 40 yards from the highway. That target must be a half-mile away. Someone, you feel sure, will hurry over to where you are to see if you made it OK. You rookie.

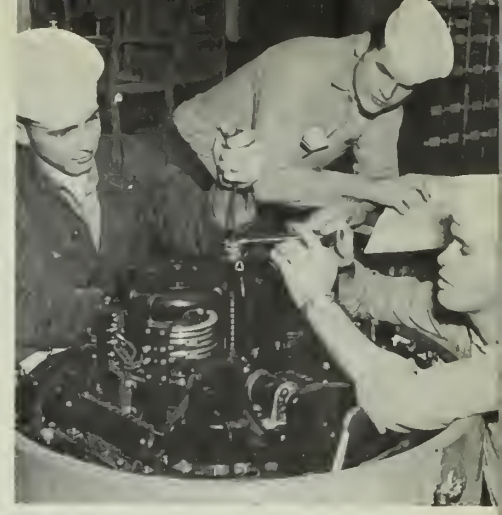
THE MINUTES PASS. Relax. Someone will be there soon and help you fold your chute. They'll probably drive over in a car, since you're closer to the highway than the target.

At least they won't poke fun at you. They all know what it's like, you guess, the first time. Anyway, you made a good exit from the chopper, and you made a good landing fall.

You look up and see a couple other guys free-falling. You watch their chutes billow. They'll hit the target.

Funny. It doesn't seem so cold any more. —**Dan Kasperick, JO1, USN**





OLD TIMER — *USS Piedmont* (AD 17) has been with Fleet 20 years. *Rt:* Crewmembers work on gyrocompass.

Flagship, Repairship

In December 1944 two battle-worn destroyers slowly moved into position alongside uss *Piedmont* (AD 17) near Manus Island in the Pacific. One of the tincans was beyond repair as far as the tender's facilities were concerned. The second was seaworthy but required some patching up. Among other things, it needed a barrel, slide and housing for its forward five-inch gun.

The *Piedmont* repair crew stripped the necessary equipment from the first ship and made the repairs. The second ship then went back off to war and the first limped to the West Coast for major repair work.

This operation is representative of the work performed by *Piedmont* during her 20 years of service to the destroyers of the U. S. Pacific Fleet.

Piedmont was launched one year after Pearl Harbor—on 7 Dec 1942 at Tampa, Fla.—and was commissioned in January 1944.

Her services to the Fleet began in Pearl Harbor four months after commissioning, when she became part of the supporting forces for the Marianas campaign. Later she supported ships in the Marshall Islands, Leyte Gulf and Iwo Jima-Okinawa operations.

In August 1945 she steamed into Tokyo Bay with the first naval occupation units. She moved down the coast of Japan to Yokosuka, where she supplied provisions and clothing to the landing forces and hospital ships standing by to c ıre for released prisoners of war. *Piedmont* was so much a permanent fixture that the pier was soon named Piedmont Pier.

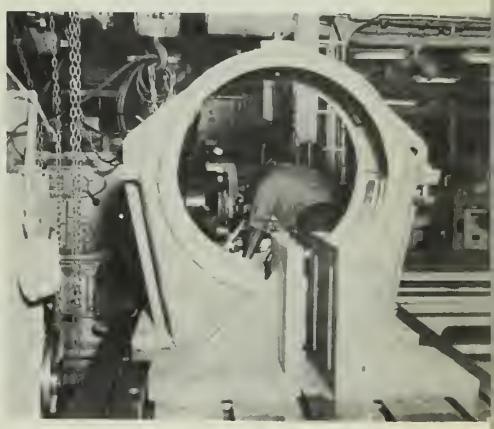
Piedmont's first tour in the Far East ended when she returned to the States in 1946. During the Korean fighting she served as flagship for the Commander, United Nations Blockading and Escort Force.

Last year *Piedmont* underwent a FRAM facelift designed to extend her serviceable life 15 years. Her primary mission now is to maintain Pacific fleet destroyers.

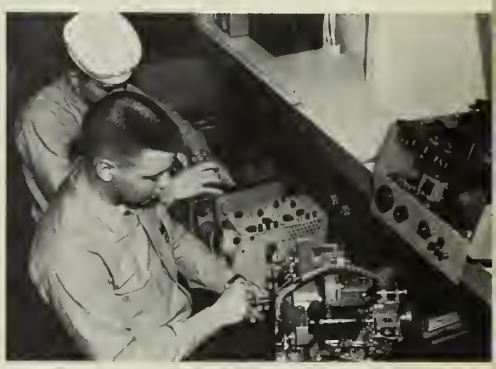
The tender's craftsmen can do anything from standard maintenance, repair and supply operations to major patch-up work. The ship's repair facilities include carpentry, shipfitting, canvas, welding, foundry, valve, boiler, torpedo, electric and optical shops. She also has a new electronic standards lab, a sonar repair and modification facility, a gyro lab and *Dash* repair shop.

Piedmont has a crew of about 800 enlisted men and 35 officers, and is currently the flagship of Commander, Cruiser-Destroyer Force, U. S. Pacific Fleet.

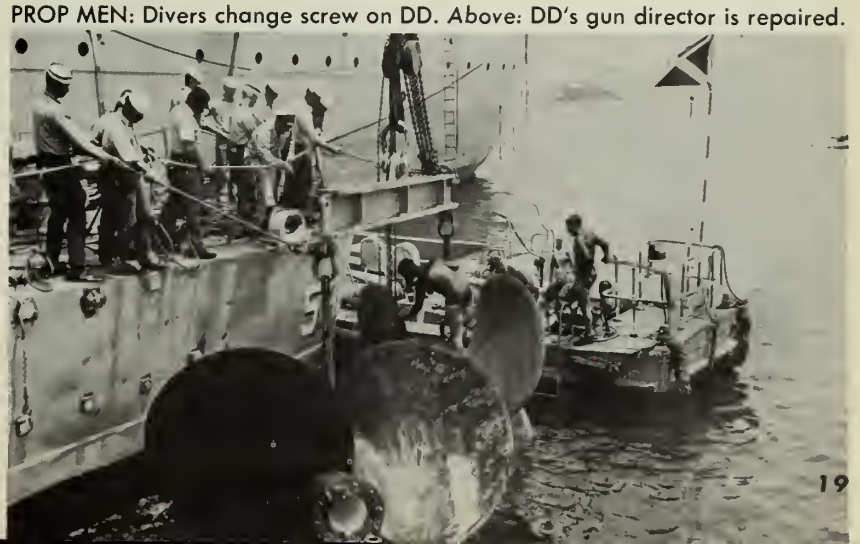
—Curt Sweeney

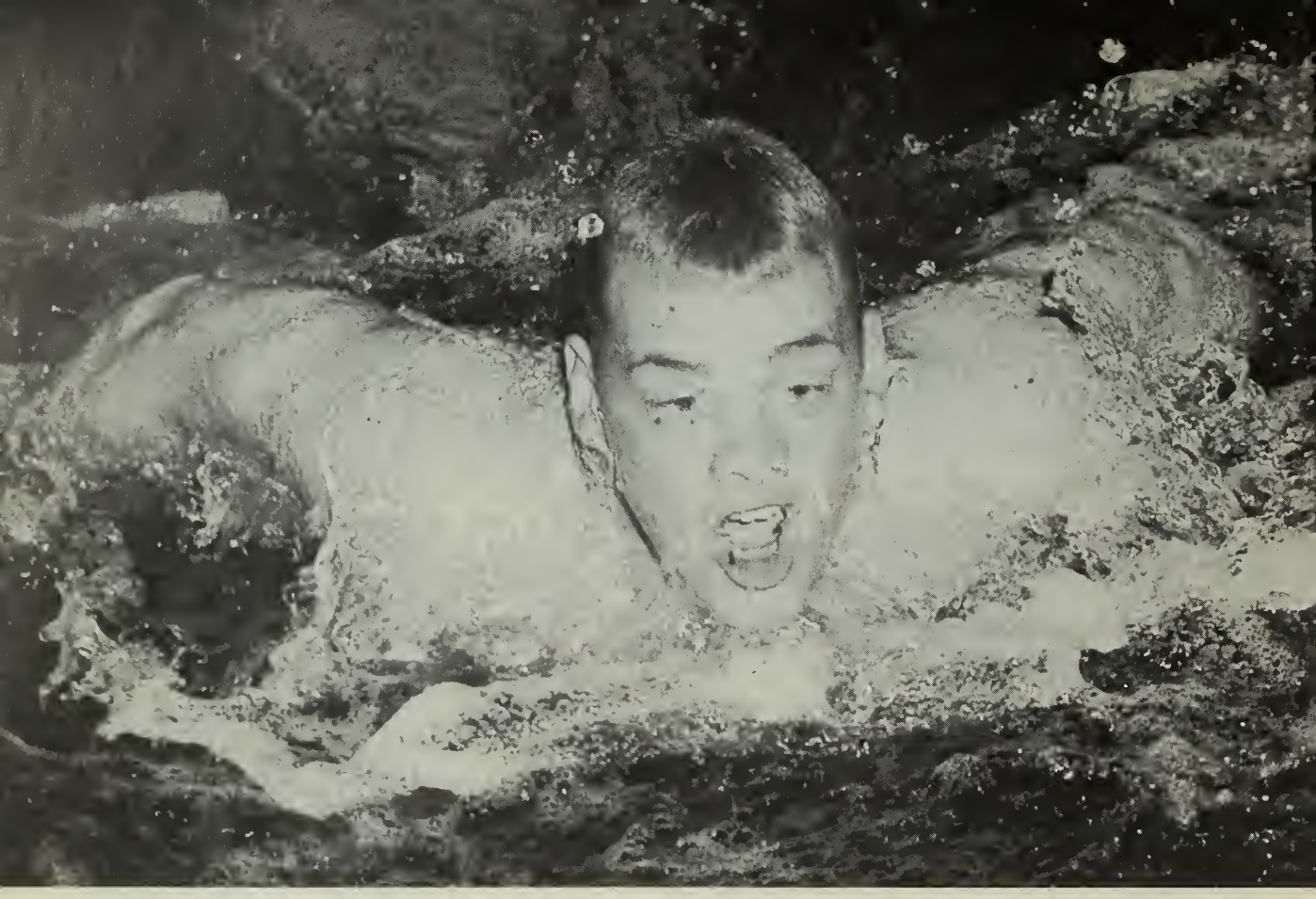


MACHINE shop of *Piedmont* carries gear for light or heavy repair jobs.



PROP MEN: Divers change screw on DD. *Above:* DD's gun director is repaired.





WINNING FORM—PacCoaster Donald Schuchmann of NTC San Diego flies through water on way to winning a medal.

THE WINNERS!

DONALD SCHUCHMANN of NTC San Diego, and David Boyd of Alameda's Coast Guard Base each won two individual gold medals to lead the Pacific Coast to the 1964 All-Navy indoor swimming championships. NTC San Diego was host.

The Pacific Coast collected 141 points—49 more than the other three teams combined, to win the title. The South Atlantic Coast was runner-up with 50 points. Western Pacific finished third with 30 points, while Northern Atlantic Coast trailed with 12.

Schuchmann won the 1500-meter freestyle and the 400-meter individual medley. Boyd took first in the 100- and 400-meter freestyle events.

Boyd also swam a leg on each of the PacCoast's two victorious relay teams.

The Pacific Coast won seven out of the nine events in the two-day meet.

Charles Kilbourne of WestPac won the 200-meter breast stroke and Donald Madison of SoLant won the 200-meter butterfly stroke to prevent PacCoast from making a clean sweep of the gold medal awards.

The first event set the pattern for the entire meet as the Pacific Coast took the top four places in the 1500-meter freestyle. PacCoast went on to win first, second and third in the 400-meter individual medley and the top two spots in the 100-meter freestyle, 400-meter freestyle and the 400-meter freestyle relay.

TROPHY TIME—Pacific Coast coach CDR Ransom Arthur (left) receives All-Navy Team Championship trophy.



PacCoast took first, second and third in the 400-meter medley relay after SoLant was disqualified, but the meet director later reversed his decision and SoLant was awarded second place. Two PacCoast teams were then bumped to third and fourth.

The 400-meter freestyle relay was a one-team race from the outset. PacCoast "A" was in first place after the first 50 meters, followed by PacCoast "B," SoLant "A," SoLant "B," and WestPac "A" and "B." The teams the contest except for WestPac "A" the contest except for WestPac 'A" swapping with SoLant "B" in the second lap.

The lead changed twice in the 400-meter freestyle, individual medley and the 200-meter backstroke. Boyd, winner of the 400 freestyle, was in fourth place at the end of 50

meters behind George Worthington, James Trimble and Richard Eastmann. Boyd overtook Eastmann at the 100-meter mark and stayed in third place for the next four laps. At the end of 350 meters Boyd made his move and took the top spot away from Worthington.

Schuchmann played a similar game in the individual medley. Donald Madison, winner of the butterfly, took charge in the fly lap of the medley race. Farden Akui of Memphis, Garrett Demarest of USS *Canberra* and Schuchmann followed in that order.

As the swimmers finished the butterfly phase, Schuchmann had moved into second place behind Madison. Akui had dropped all the way back to fifth behind William Murr, Charles Kilbourne, Schuchmann and Madison. Demarest trailed the pack.

Schuchmann overtook Madison at the end of 150 meters – halfway through the backstroke phase – as Demarest moved from last to third place behind Madison. Murr was fourth, Kilbourne fifth and Akui had dropped to last.

Going into the breast stroke, Schuchmann was still leading. Demarest moved into second as Murr took possession of third place. Madison dropped to fourth.

Murr took second place from Demarest at the 250-meter mark. Kilbourne exchanged fourth and fifth places with Madison who was gagged by water and had to pause at the wall.

The swimmers stayed in that position until the last 50 meters when Demarest again took second, dropping Murr to third. Madison, who was first during the first quarter of the race, finished fifth and Akui, who was in second place at the end of 50 meters, finished last–75 meters behind Schuchmann.

Basketball

DEFENDING champion SUBPAC *almost* did it again, but under pressure from a relentless SUBLANT squad the Pacific Submarine Force *Raiders* were forced to relinquish their All-Navy basketball title. SUBLANT is the new champion.

The double elimination tournament held at Naval Station, Norfolk, was the first All-Navy sports championship staged this year. The five participating teams and the areas they represent are:

- *North Atlantic:* U. S. Coast Guard Station, Cape May, N. J.
- *South Atlantic:* Naval Air Station, Norfolk, Va.
- *Atlantic Fleet:* Commander Submarine Force, U. S. Atlantic Fleet.
- *Pacific Coast:* Commander Amphibious Force, U. S. Pacific Fleet.
- *Western Pacific:* Commander Submarine Force, U. S. Pacific Fleet.

In the opening round of play, SUBPAC met PHIBPAC and scored an 89-71 victory. Five of SUBPAC's players, led by Leroy Jackson's 16 points, hit in double figures, giving an early indication of the *Raiders'* balanced strength. PHIBPAC's Jerry Feld copped scoring honors in the game with his 17 points.

The second game of the first round brought about a scoring duel between Duke Martin of Cape May and small Arnie Harris of the Norfolk *Flyers.* Martin's 40 points (against Harris' 36) paced Cape May to a 92-85 victory. SUBLANT drew a bye in the first round.

The second round was the end of the line for PHIBPAC, who bowed to Norfolk 87-78. SUBLANT started off hotly with a 91-76 victory over Cape May, with the winner's Bruce Hewitt hitting for 30 points. Mike Joyce of Cape May made a fine 25-point showing.

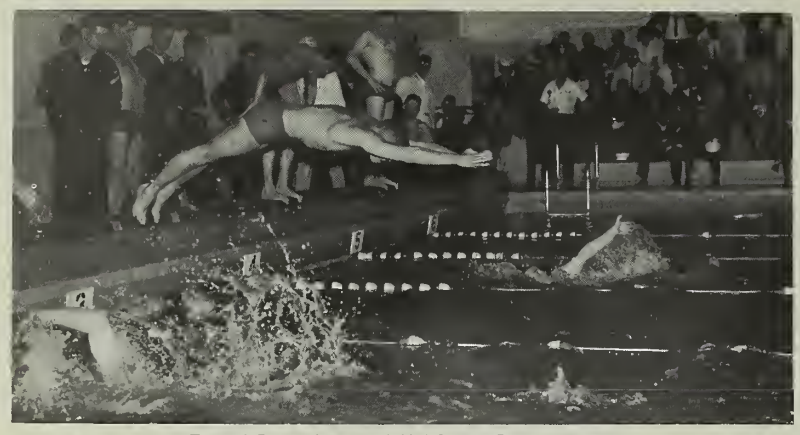
The results of the third round of play were indicative of the tournament's final outcome, although only SUBLANT would have been happy to know this. The round began with



TWO HIGH — SubLant's Al Clark and Leroy Jackson of SubPac try to control ball in final game of 1964 All-Navy basketball tournament.



ATLANTIC FLEET basketball champions, the SubLant Sea Raiders, went on to capture the All-Navy championship by defeating SubPac's team.



Final Results in All-Navy Swimming

Place	Name	Time	Team	Activity
1500-Meter Freestyle				
1	Dan Schuchmann	19:58.9	PacCoast	NTC San Diego
2	George Worthington	20:43.5	PacCoast	DesFlot 7
3	William Murr	21:05.6	PacCoast	NavSta Treasure Island
4	Gerald Morden	21:46.2	PacCoast	NTC San Diega
5	Allan Roedel	23:14.7	SoLant	NAS Memphis
6	Tam Jason	23:38.5	WestPac	USS Tiru
100-Meter Freestyle				
1	David Bayd	0:59.7	PacCaast	USCG Base, Alameda
2	Cleve Carney	1:00.5	PacCoast	PhibPac/UDT
3	James Trimble	1:01.0	SaLant	NAS Norfolk
4	Dick Marshall	1:01.5	PacCoast	NavSta Treasure Island
5	Donald Madisan	1:01.9	SoLant	NAS Memphis
6	Garrett Demarest	1:02.3	PacCoast	USS Canberra
200-Meter Breaststroke				
1	Charles Kilbourne	2:52.0	WestPac	NAS Barbers Point
2	Lee Smutz	2:58.7	NorLant	ComFour
3	Ransom Arthur	3:01.2	PacCaast	NTC San Diego
4	Javentino Luna	3:05.4	PacCoast	NAS Mare Island
5	Jim Chestnut	3:19.8	WestPac	NAS Barbers Paint
6	Carl Leanard	3:22.1	SaLant	NAS Memphis
200-Meter Butterfly				
1	Donald Madison	2:36.9	SoLant	NAS Memphis
2	Richard Eastmann	2:42.0	PacCoast	PhibPac/UDT
3	Donald Schuchmann	2:49.2	PacCoast	NTC San Diego
4	William Murr	3:03.8	PacCoast	NavSta Treasure Island
400-Meter Freestyle				
1	David Boyd	4:59.5	PacCoast	USCG Base, Alameda
2	Gearge Worthington	5:03.2	PacCoast	DesFlot 7
3	James Trimble	5:09.9	SoLant	NAS Norfolk
4	Richard Eastmann	5:05.8	PacCoast	PhibPac/UDT
5	Warren Dick	5:25.2	WestPac	NAS Barbers Point
6	Allan Raedel	5:40.1	SoLant	NAS Memphis
400-Meter Individual Medley				
1	Danald Schuchmann	5:35.2	PacCoast	NTC San Diego
2	Garrett Demarest	5:45.3	PacCaast	USS Canberra
3	William Murr	5:45.9	PacCoast	NavSta Treasure Island
4	Charles Kilbaurne	6:03.1	WestPac	NAS Barbers Point
5	Danald Madison	6:20.9	SoLant	NAS Memphis
6	Farden Akui	6:52.2	SaLant	NAS Memphis
200-Meter Backstroke				
1	Dena Ferrandini	2:35.6	PacCoast	USS Interceptar
2	Richard Campbell	2:39.1	NorLant	NTC Great Lakes
3	James Trimble	2:48.3	SoLant	NAS Norfolk
4	Gerald Morden	2:51.5	PacCoast	NTC San Diego
5	Thamas Wingate	2:56.7	NorLant	ComFour
6	Gerry Haver	3:00.6	WestPac	NAS Barbers Point

Norfolk being eliminated after suffering a 91-76 loss to Cape May. SUBLANT and SUBPAC met for the first time, with unfortunate results for SUBPAC. The game went into an overtime period after the score stood at 74-74 at the end of regulation play. SUBLANT's James Carrino, with 29 points, paced the winners to an 82-78 finish.

One game was played in the fourth round. SUBPAC succeeded in knocking Cape May out of competition to win another crack at SUBLANT in the finals. The *Raiders* left little doubt of their intentions, pounding Cape May 101-87 on balanced scoring.

With SUBLANT going into the semi-finals undefeated, SUBPAC had its work cut out. The *Raiders* needed two victories to take the crown. They got one of them.

Led by Donald Snyder and Eugene Lake, the defending champs squeezed out an 88-85 win in the semis, despite the loser's Bruce Hewitt donating 24 points to his team's cause.

On the day of reckoning it was anyone's guess as to the possible outcome. Two excellent teams were closing out a hard-fought, well-played tournament, and SUBLANT, hard-fightingest of all at this stage, brought the curtain down with a 92-80 victory to become the 1964 All-Navy Basketball Champions.

Final standings in All-Navy Basketball Championship Tournament.

	W	L
COMSUBLANT	3	1
COMSUBPAC	3	2
Cape May C. G.	2	2
NAS Norfolk	1	2
COMPHIBPAC	0	2

—Bill Howard, JO1, USN.

Bainbridge Blasts Record

The Bainbridge pistol team made a decisive sweep of the Fifth Naval District indoor pistol championships and set a new record score of 1061 for this competition. Each team member won a gold medal.

Two other teams, from Fifth Coast Guard and Naval Station, Norfolk, topped the previous record score of 1009 to win silver and bronze medals respectively.

Bainbridge also did well in the open championships and the individuals by class. Bainbridge shooters brought home 47 trophies, nearly half of the 116 awarded.

J. M. Pringle, PNC, won second place in the open championship. He also won first place .22-cal. slow fire; first place .22-cal. rapid fire;

first place .22-cal. national match course; second place .45-cal. timed fire; first place .45-cal. slow fire; and first place .45-cal. national match course, all in the expert class. He also won the third place open award for .45-cal. aggregate, and the first place .22-cal. aggregate open award.

In the master class, LT T. H. Fraley took first place .22-cal. rapid fire; second place .45-cal. rapid fire; and third place .22-cal. aggregate (open award).

In the sharpshooter class Bainbridge had two winners: LT J. F. Jordan won first place grand aggregate, first place .45-cal. aggregate, second place .45-cal. aggregate; second place .45-cal. timed fire; second place .45-cal. rapid fire; and first place .45-cal. national match course. Z. V. (Ginny) Armstrong, PN1, won second place in the .22-cal. rapid fire contest.

Two Bainbridge shooters placed in the marksman class. Art Graley, MM1, won first place .22-cal. timed fire; LCDR W. M. Kelly, Jr., won first place .45-cal. timed fire, second place .45-cal. national match course; and second place .22-cal. timed fire.

Two Bainbridge men also won in the unclassified division. J. L. Caviness, PNC, won first place grand aggregate, first place .45-cal. slow fire; second place .22-cal. aggregate; second place .45-cal. aggregage; second place .22-cal. slow fire; second place .22-cal. timed fire, second place .45-cal. rapid fire.

Ivan Stubbs, RM2, won second place grand aggregate; first place .45-cal. aggregate; first place .22-cal. national match course; first place .45-cal. timed fire; second place .45-cal. slow fire; second place .45-cal. national match course; and third place .22-cal. aggregate.

Princeton *Hoops Champs*

The hoopsters from USS *Princeton* (LPH 5) became the Los Angeles Naval Base fleet champs with a smashing 70-37 victory over USS *Haven* (AH 12) in the final game of the season.

Princeton concluded the 1963-64 season with a remarkable record of 23 wins and five losses.

Using a fast-breaking offense coupled with a harassing defense, team balance was the keynote in the many *Princeton* victories, with often four and five men scoring in double figures. Mike Garrity was outstanding.

All Navy Swimming Results (Cont'd.)

Place	Team	Time	Members
400-Meter Medley Relay			
1	PacCoast "A"	4:42.7	Dean Ferrandini Ransam Arthur Richard Eastmann David Bayd
2	SoLant	4:44.0	James Trimble Donald Madison Dale Dalmas Machael James
3	PacCoast "B"	4:45.6	Donald Schuchmann Javentina Luna George Warthington Cleve Carney
4	PacCoast "C"	4:56.5	Gerald Morden William Murr Garrett Demarest Richard Marshall
5	WestPac "B"	5:06.1	Gerry Haver Charles Kilbaurne Warren Dick Jack Applegren
400-Meter Freestyle Relay			
1	PacCoast "A"	4:01.6	David Bayd Garrett Demarest George Warthingtan Cleve Carney
2	PacCoast "B"	4:14.8	Donald Schuchmann Dean Ferrandini Richard Eastmann Richard Marshall
3	SoLant "A"	4:17.6	James Trimble Donald Madisan Farden Akui Dale Dalmas
4	WestPac "A"	4:30.5	Leray Raberts Gerry Haver Jack Applegren Warren Dick
5	SoLant "B"	4:34.5	Robert Camamata Spencer Fuller Gregary Hallady Allan Roedel
6	WestPac "B"	4:43.2	Ricardo Ferrer Thomas Stone James Chestnut Tam Jasan



YEA TEAM — Pacific Coast swimming team poses after winning title.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Those Wings Have Prestige

SIR: I would like to know why aircrewman wings are not awarded on a more permanent basis. Many men I know feel that they are entitled to wear them, but aren't allowed to. Take me, for example.

I have logged more than 4000 hours in C-121 *Constellation* type aircraft. I have been designated as an airborne CIC watch officer. I've been qualified in three VW squadrons.

When I'm transferred to shore duty, however, I am not allowed to wear the aircrewman wings.

The prestige of wearing these wings enhances morale. I think that once they are awarded, the aircrewmen concerned should be permitted to keep them.—R. C. H., AC1, USN.

• *We agree that the prestige of wearing the aircrewman insignia (as it's officially called) enhances morale. We don't agree, however, that awarding the insignia on a permanent basis would further its prestige.*

Of course there's no way of knowing for sure, but we suspect that if the award were to be made permanent, a majority of the Navy's airdales would in time be wearing it. (How much prestige would go along with owning a yacht if everyone else had one?)

As it now stands, only qualified aircrewmen may wear the insignia (winged, gold metal pin with the block letters "AC" superimposed upon an anchor center design).

It shows that you're actually serving as a regular member of a flight crew. It may not be worn when you are not assigned such duties, or when you become disqualified after having once been qualified.

Details with regard to who may wear it and for how long are contained in article C-7403 of the "BuPers Manual," and article 0656 of "Uniform Regulations."

Without elaborating we can say here that the aircrew insignia is not an easy one to win, and once awarded may be tough to keep. Those who wear it deserve the prestige that accompanies a distinctive device showing some special, current qualification.

Congratulations on having won it. —ED.

Don't Polish Those Medals

SIR: I have been involved in a discussion about the care of service medals. They are issued in a "tarnished" condition and, since they are brass, I say they should be polished for inspections. The other side claims a medal is worn as issued, whether it be a Navy Cross or a campaign medal.

I have seen them worn in both conditions, and there seems to be no basis for judgment in our ship's instructions. Who is correct?—J. G. R., CWO, USN.

• *The unwritten law that all Navy brass must be polished to a mirror shine does not hold true in this case. Medals are to be worn as issued.*

There is a good reason for the rule. The metal surfaces of Navy decorations are provided with an oxidized (dull) satin finish with a lacquer protective coating. Therefore, they will not tarnish or require polishing. Polished medals could be considered damaged, since the protective coating and satin finish have been removed.

Medals should be cleaned periodically with soap and water. The ribbons can be dry cleaned or replaced. When damaged, medals should be replaced in accordance with SecNav Inst. P1650.1C.

Although all awards have the satin finish, not all are dull. The Navy Cross, Silver Star and Purple Heart, for instance, could be considered bright medals when compared with the DSM, AM or Good Conduct Awards, but their surfaces are still oxidized and consequently should not be polished.

Occasionally, identical medals will have minor shade differences depending upon the manufacturer, but are within the shade limits prescribed in the specifications.—ED.



YEAR'S BEST — James M. Dickerson, EN2, USN, gets Mine Division 33's Sailor of the Year Award for 1963.

You're Right, Three Times

SIR: A question with regard to the Good Conduct Medal has been discussed on board my ship for some time, and has yet to be answered. Perhaps you can help.

How long may LDOs and other officers who formerly served in an enlisted status continue receiving the Good Conduct award? May additional awards be made only while the officer concerned is in a temporary commissioned status? Once he receives a permanent commission, do the Good Conduct awards cease? But, may any Good Conduct award (medal/ribbon with stars) earned before permanent commissioning be worn afterwards?—L. O. F., LT, USN.

• *Yes, yes, yes, to your last three questions, which, resolved, answer the first.*

Here's what the Awards Manual has to say on the subject: "An enlisted person appointed a temporary warrant or commissioned officer, or a Naval Academy midshipman, may include such temporary service upon reverting to an enlisted status for any purpose (including for discharge to accept appointment as permanent officer) in computing total service toward eligibility for a Good Conduct award. Except as provided above, service in warrant, commissioned, or Naval Academy midshipman status may not be included in computing time served."—ED.

Rendering Honors

SIR: I have heard conflicting opinions about where the boatswain's mate of the watch should stand while rendering honors with sideboys. Someone told me I should stand at the end of one rank, but someone else said the BMOW's position is behind one of the sideboys.

I haven't been able to find the official word. As BMOW, where should I stand?—J. E. B., BM2, USN.

• *There is no prescribed position for the boatswain's mate of the watch during the rendering of honors, nor, for*

that matter, for the OOD or commanding officer.

"U. S. Navy Regulations" spells out the general procedures to be followed when dignitaries arrive on board, and specifies the number of sideboys and the size of gun salutes. Where the deck watch stands, however, is strictly up to the command.

Nevertheless, here are a few general (and unofficial) rules which are a combination of common sense and material taken from an old boatswain's mate handbook.

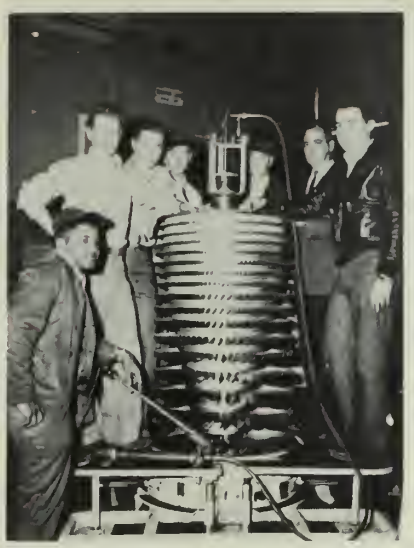
Position of the BMOW is dictated by the mode of transportation used by the arriving official. If the visitor comes by boat, the watch takes station next to the rail, behind the forward row of sideboys. If arrival is by automobile, coming down the pier from the ship's bow, the BMOW stands behind the after row of sideboys, again next to the rail, where he may closely observe the visitor's approach.

The OOD should stand at the inboard end of the forward row of sideboys. In that position he faces the arriving dignitary. Before the boat or auto nears the brow, however, the OOD usually stands on the upper grating.

Since these procedures are strictly unofficial, you should consult your "Ship's Organization and Regulations Manual" to determine your correct position. In many cases the usual positions may be altered by preference of command or due to layout of individual ships.—Ed.

Even Bathtubs Flew in Early Days

Sir: Just *why* it happened is anyone's guess. Maybe two pilots were arguing and one of them meant to say "go fly a kite," and instead said "go fly a bathtub." Nevertheless, we have photographic evidence that it *did* happen and your centerspread about offbeat aircraft (All Hands, November 1963) reminded us about it—the 'ole 1922 flying bathtub of the First Marine Aviation Group, Quantico, Va.



JET JOB DONE—Men of NAS Atsugi, Japan, aircraft maintenance jet shop are assembled around first J-79 jet engine they've completely repaired.

Here's what happened: In 1922 members of that unit lashed a bathtub to the torpedo rack of a *Martin MT;* then the plane was flown from Brown Field, Quantico, Va., to Gettysburg, Pa. The bomber was powered by two 12-cylinder, 400-hp engines, and had a top speed of 110 mph with a ceiling of 8400 feet.

We don't know whether the bathtub slowed the plane down.—MSgt. J. T. Frye, usmc.

• *Looks like you could go places with this one—at least Harold Lloyd or Buster Keaton could have. Our one objection to bathing in this manner is the lack of head room (see cut). But, supposing that one lies down in the tub, even this objection is perhaps invalid.*

Frankly, we're more puzzled about the flying tub than our reader seems to be, so we'll bite—why did *they do it?*—Ed.

Ghost Guns Appear Again

Sir: If J. B., TM1, usn, whose letter was carried in the August 1963 All Hands, is still wondering about guns on submarines, I suggest that he consult the French Navy Section of *Jane's Fighting Ships.* I seem to recall having seen a submarine cruiser listed about 1936 which toted two eight-inch guns in a turret forward in the main superstructure.

Speaking of ships' guns, when I was in uss *Vega* (AK 17) in 1941, I was told that she had an 18-inch gun aboard that was used for ballast. I believe one of the hospital ships also had an 18-incher for ballast.—J. C. S., AT1, usnr.

• *We pass your tip on submarine guns to J. B. and other interested readers forthwith. Evidently, you are referring to the French submarine* Surcouf, *which was the largest submarine in the world at that time.*

As for the 18-inch gun you mentioned, we suspect it may someday be classed among the famous spectres of the sea. It has been the subject of sea stories for years and it has sporadically haunted the pages of All Hands *for nearly two decades.*

Inquiries by All Hands *staffers in the forties revealed that one 18-incher was really built as an experimental model. In 1947, it was said to be at the Naval Proving Ground, Dahlgren, Va.*

Interest in the gun stirred up by the All Hands *articles prompted a search of the dark spaces on board* Relief *(AH 1) where it was reported to have been used to compensate for the weight of a gyro-stabilizer which was never installed.*

The searchers found no gun barrel, but did find ballast of pig-iron and concrete in the space intended for the gyro-stabilizer.—Ed.



CLEAN FLIGHT—A *Martin MT* flies from Quantico, Va., to Gettysburg, Pa., with bathtub lashed to torpedo rack.



USS MISSOURI'S championship football team on board the battleship.

Nostalgic Reminder of Battleship Navy of Yesteryear

SIR: I think I have something to contribute to ALL HANDS readers from my Navy days, which were back in the early 1900s.

I am enclosing three photographs: One of the USS *Missouri* (BB 11) race boat crew after winning the Battenburg Cup from USS *Georgia* (BB 15) in 1912; and two of the *Missouri* football team in 1913 or '14.

In the football photo, behind the trophy the man standing on the extreme left is ENS Richard Evelyn Byrd, USN, who afterwards (15 Mar 1916) retired from active duty because of a "football knee." Fortunately that was not the last connection this fine officer had with the Navy. He was recalled to active duty in May 1916.—John G. Ridenour, ex-Chief Boatswain's Mate, USN.

• *The photographs are marvelous, and we thank you, sir (see cuts).*—ED.



USS MISSOURI'S championship football team on the practice field.



USS MISSOURI'S race boat crew—winner of the Battenburg Cup.

A Reefer Is Not Always a Ship

SIR: Are chief petty officers authorized to wear the reefer? Several CPOs on the station claim that it is an optional part of their uniform, while others say it is not. Many of us would like to wear it as a car coat both on the station and when traveling to and from work.

Article 0137 of *U. S. Navy Uniform Regulations* authorizes the optional wear of the coat for officers, but it is not mentioned under the articles pertaining to the chief's uniform.

If the reefer is not authorized, we would like to suggest that the Uniform Board look into the matter. The coat could be suitably adorned with gold buttons without loops and, if necessary, the appropriate rating badge could be attached.—R. G. S., HMC, USN.

• *We will have to admit that your question had us stumped—no one on the staff had any idea what a reefer was (that is, as part of the uniform). So we decided that, since it was an article of the commissioned officer's uniform, we'd make a wider check in the Bureau before going down to the Uniform Board. The standard reply from all was that a reefer was a refrigerator. A dictionary didn't help either.*

From the Uniform Board came the information that a reefer is a peacoat—with gold buttons—which is issued to midshipmen as part of their seabag. Since the coat is usually still in good condition when the midshipmen receive their commissions, the Uniform Board has authorized it also for on-station use by officers. Even so, not many officers wear them and, with the exception of a few ships pulling cold duty in the North Atlantic, the reefer is seldom seen as a part of the commissioned officer's uniform.

The fact that CPOs are interested in wearing the peacoat (with gold buttons, of course), caught some by surprise. Many sailors E-6 and below will be pleased to hear that the chief does place a certain sentimental value on his old set of blues.

However, the peacoat (with gold or black buttons) is not authorized for wear by CPOs. It might also be noted that the peacoat is considered a distinctive part of the uniform and as such may not be worn with civilian clothes. This also applies when no rating badge is attached.—ED.

More on Enlistment Oath

SIR: Your answer to a letter in the January issue of ALL HANDS prompts one to repeat the remark that many American traditions are older than the United States. When I read the form of oath prescribed for the U. S. Army and Marine Corps in 1798, I was struck by the familiarity of the wording, for I have sworn to "be faithful and bear

true allegiance to Her Majesty, Queen Elizabeth the Second, her heirs and successors according to law. So help me God."

This form of oath is taken by recruits in the forces of most of the Commonwealth (at least of those Dominions that acknowledge the Queen as sovereign as well as head of the Commonwealth) besides naturalized citizens, civil officials and bishops of the Anglican communion.

Queen Elizabeth I was the first English sovereign to require the oath of allegiance from her soldiers, and in her day it was the oath of an individual to his overlord. He swore to "be true and faithful to the King and his heirs, and truth and faith to bear of life and limb and terrene honour, and not to know or hear of any ill or damage intended him without defending him therefrom." The oath was superseded about 1700 by the one in use to this day.

Another point where American custom paralleled the British until 1899 was in the Navy not being sworn—the Royal Navy to this day is not, although the Royal Marines are. Probably the first point at which the Royal Canadian Navy broke from the British tradition, upon which it was founded, is that the Naval Service Act that established it in 1910 required the oath of all hands.

The National Defense Act of 1950 (which established all three services on a common statute) however, says that entries will be sworn with such oaths as may be prescribed by regulation. Queen's Regulations are issued by Order in Council (which corresponds to an Executive Order of the President) and may be changed without consulting Parliament.

It seems that the main reason for this is to allow for special forms for volunteers who are not British subjects and who might lose their citizenship by taking the oath of allegiance. They swear "well and truly to serve Her Majesty, Queen Elizabeth the Second, Her Heirs and successors according to law, in the Royal Canadian Navy until lawfully released, that I will resist Her Majesty's enemies and cause Her Majesty's peace to be kept and maintained and that I will, in all matters pertaining to my service, faithfully discharge my duty. So help me God."

This oath, strangely enough, seems to resemble that now in use in the U. S. Navy. — P. A. C. Chaplin, LT, RCNR (Ret'd).

• *When we replied to our original inquirer in the January issue, we were under the impression that we had given a reasonably comprehensive answer.*

Your most welcome addenda merely comfirm the thesis that none of our social customs springs full-fledged from nowhere. All must have an origin, and some reach surprisingly far back.—ED.



UP TO SEA—*USS Sailfish* (SS 572), a unit of Submarine Squadron 10 leaves port of New London, Conn., and cruises on surface of Atlantic.

Just How Old Are Rhyming Logs?

SIR: I've enjoyed the New Year's Logs you've published each January the past several years. Though it's not the season, I thought you might be interested in a log entry made nearly two decades ago on board USS *General M. B. Stewart* (AO 140). It was 1 Jan 1946.

On course one fifty-nine degrees
and steaming as before
We left Karachi, India,
And we're bound for Singapore.
Magnetic compass one six five with
revs at seven eight,
The course is set for down the coast
then through Malacca Strait
With boilers one and two in use,
While two and three supply the juice,
And two and three keep lights aglo,
So "Helmsman, steady as you go!"

This rhyming log entry was signed by LTJG J. F. Davis, USNR. If you're wondering what I'm doing with an old ship's log, permit me to explain that part of my duties (with the Naval History Division) involves sifting through old logs and action reports for information used in ship's histories.—P. C., YN2, USN.

• *For the information of readers not familiar with a ship's New Year's Log, here's some background: Each New Year's Eve the OOD with the 0000 to 0400 watch is encouraged, by Navy tradition, to write his log in verse. At the same time, he is bound by "Navy Regs" to enter certain essential information that may be found in the log at any other time of the year.*

Combining the two, as we've said many times, is difficult, but many ships have succeeded in coming up with some interesting verse. As a result, ALL HANDS *has encouraged the submission of New Year's rhyming log entries for publication in January of the following year.*

We agree that it's not the season for New Year's logs, but we think Stewart's *log is interesting in its own right. We can't help but wonder when and how the custom began. Was* Stewart's *log one of the earlier ones or does the custom go back much farther? Was LTJG Davis responsible for its beginning? If not, who knows of an older New Year's log?*—ED.

ON TARGET — During refresher training in Caribbean, *USS Robert L. Wilson* (DD 847) had 24 hits in as many shots from her 5-inch mounts.



Ship Reunions

News of reunions of ships ond orgonizotions will be corried in this column from time to time. In plonning o reunion, best results will be obtoined by notifying the Editor, ALL HANDS Mogozine, Room 1809, Bureou of Novol Personnel, Novy Deportment, Woshington 25, D. C., four months in odvonce.

• USS *Allentown* (PF 52)—A reunion is scheduled on 4 and 5 July at Allentown, Pa. For information, write to George R. Holko, 421 Limestone St., Catasauqua, Pa.

• USS *Gleaves* (DD 423)—A reunion is scheduled for 25 July at Villa Pace, Smithtown, Long Island, N. Y. For details, write to David A. Dolan, 140 Church St., Kings Park, N. Y.

• USS *LST 618*—A reunion is scheduled for 1 and 2 August in Staunton, Va. For information, write to G. B. Ramsey, 1520 Dennison Ave., Staunton, Va.

• *3rd Special Seabees*—A reunion is set for 7-9 August in Philadelphia, Pa. For details, write to Hugh O. Baney, 125 Elfreth's Alley, Philadelphia, Pa. 19106.

• USS *Jobb* (DE 707)—A reunion is scheduled for 20 May at the Brooklyn Navy Yard. For details, write to Donald Keiran, 105 Cedar Grove Pkwy., Cedar Grove, N. J.

• *93rd Seabees*—The 15th annual reunion will be held 3-5 September at the Hilton Deshler Hotel, Columbus, Ohio. For more details, write to Charles B. Lindsay, 284 Catawaba, Westerville, Ohio.

• *96th Seabees*—The third reunion will be held in Arlington, Texas (between Dallas and Fort Worth), 14-16 August. World War II members who wish to attend may write to Jake Wall, 3709 Seguin Drive, Dallas, Texas.

• *302d Seabees*—The 17th annual reunion is scheduled for 17-19 July. For more details, write to Martin A. Lowe, 8441 Bayard St., Philadelphia 50, Pa.

• *NAS Columbus, Ohio*—A reunion will be held at North American Park, Columbus, on 27 June. For further details, write to Gene McIntosh, 1329 Striebel, Columbus, Ohio.

• *NS New Orleans, La.*—A reunion is scheduled for 26-29 June at the Sheraton Jefferson Hotel, St. Louis, Mo. For information, write to Al Reck, 4922 Lansdowne Ave., St. Louis 9, Mo.

• *Underwater Demolition Team 16*—A reunion is now being planned. For more information, write to Edward Garabedian, 20 Claffey Ave., Worcester, Mass. 01606.

• USS *Vincennes* (CA 44)—A reunion for survivors is proposed for August 1967, the 25th anniversary of the ship's final battle. For details, write to Clifford N. Mahoney, 53 Douglas Rd., Glastonbury, Conn.

• *VP 94*—A reunion for World War II members of this PBY ASW squadron is planned for 1965. For additional information, write to David Watrous, 121 West Wacker Drive, Chicago 1, Ill.

General Mess Funds

SIR: The general mess fund on my ship always has money left over at the end of the fiscal year. This is money that was appropriated to purchase food for the general mess, but each year the unused portion is turned back in.

Why isn't this money kept and divided among the crew? After all it was appropriated for the crew's benefit. If it's all right for the wardroom mess members to divide the excess money from their mess among themselves each month, why isn't it fair to carry out the same procedure in the general mess? Or better yet, why not spend all of the money for its intended purpose? I have yet to see an overfed crew. —T. F. O., BMC, USN.

• *And we have yet to see an underfed crew. The error in your reasoning, chief, is that you are drawing a parallel between a general mess and a wardroom mess that does not exist. You have overlooked the fact that the wardroom mess operates as a private mess, with each member contributing from his pocket each month. Any money accruing would therefore have come from the officers' monthly cash payments, and it is entirely proper that any excess funds should be returned to those officers from whom the funds came originally.*

This situation does not exist in the general mess. Your three squares a day are part of your Navy benefits, paid for with appropriated funds. In certain cases, if you do not subsist in the general mess, or if there is no general mess where you are stationed, you receive either a commuted rations payment or a basic allowance for subsistence, depending on the situation.—ED.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

Ships for Moon Project

The push to land a man on the moon now has the benefit of Navy experience in the design and construction of ships used for tracking objects in space.

Under an agreement by the civilian space agency NASA and the Department of Defense, all instrumentation ships required to support space programs, including the man-to-the-moon Project *Apollo*, are being placed in a DOD-operated pool with the Navy responsible for design, construction, and modifications.

An Instrumentation Ship Project Office (ISPO) has been established in the Office of Naval Material to handle the new workload.

The ISPO responsibility involves, in general, 20 general purpose ships used for space tracking and data acquisition. At present, 17 such instrumentation ships are in service, two of which will be modified for work with Project *Apollo*.

Three additional ships will be taken from the Maritime Reserve Fleet and converted for *Apollo* use by 1968.

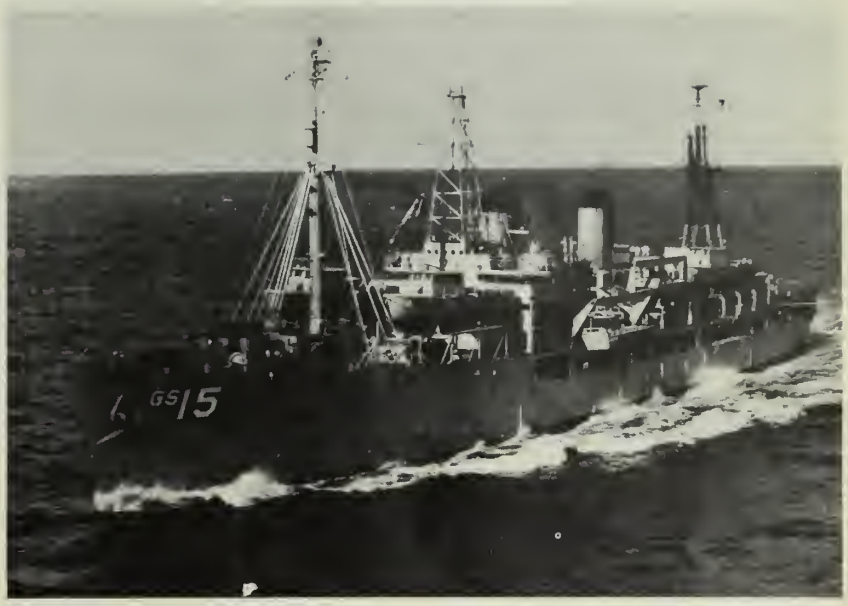
Satellite of the Silent Sun

A Navy satellite, designed to monitor the sun's cosmic ray output, will relay sunspot information to 15 nations during the International Years of the Quiet Sun.

During the years of the quiet sun, roughly 1964 and 1965, sunspot activity will be at the low point of its 11-year cycle. Information already received from the satellite has confirmed previous computations that the sun is rapidly approaching the period of relative quiet.

The satellite was launched in January from the Pacific Missile Range. It is an aluminum ball 24 inches in diameter, with a nearly circular orbit about 550 miles above the earth and inclined 69.8 degrees from the equator.

Scientists hope that information received from the satellite will speed the development of a system to predict the solar storms and consequent increase of cosmic radiation which interfere with radio communications on the earth and may pose a hazard for space travelers.



TO SEA TO SEE — The surveying ship *USS Tanner* (AGS 15), an attack cargo ship until converted in 1946, steams at sea on routine mission.

21 Candles for *Chickasaw*

After 21 years' continuous service, USS *Chickasaw* (ATF 83) is none the worse for wear. Her crew, in fact, says the old fleet tug handles a full day's work as easily now as she has repeatedly over the years. This could take some doing.

Commissioned in February 1943, *Chickasaw* pulled tough assignments in the midst of World War II action in the Pacific. She was awarded 10 medals and ribbons and eight battle stars for her service there and in the Korean conflict.

She has since maintained a constant schedule of overseas deployments. Among other things, *Chickasaw* has towed virtually every type of Navy ship.

Now based in San Diego, *Chickasaw* works with Service Squadron One. The tug's crewmembers (who think their ship is one of the oldest in the Navy with regard to continuous active service) observed *Chickasaw*'s 21st by partaking of an appropriate birthday cake, with extra frosting in the form of holiday routine.

BUILDERS OF THE NAVY



Oliver Hozard Perry's ship Lowrence flew o flag beoring the slogon "Don't give up the ship" but during the Bottle of Loke Erie, Perry wos hord put to comply with the odmonition. Four-fifths of his crew were killed or wounded ond Lowrence wos out of control. He lowered his flog, entered o rowboot ond was ferried to Niogaro. He ordered his ships to regroup ond, in Niogoro, broke the British line. Within 15 minutes the bottle wos won. After the British surrender, Perry wrote the message: "We hove met the enemy ond they ore ours."



THE NEWLY commissioned guided missile frigate *USS England* (DLG 22) steams in Pacific, where she is serving as unit of CruDesFlot Three.

Independence Post Office

There are more than 4000 mail-hungry men aboard USS *Independence* (CVA 62), none of whom are ever satisfied with the amount of mail they receive. If a man receives one letter a day he figures he should have three, and if he is lucky enough to receive three he thinks he should have five.

There may be a good reason for this—*Independence* men wrote 700,000 letters home during a recent cruise.

The 10-man post office staff cannot deliver letters that aren't sent, but they can keep pace with the crew by rapidly delivering all mail that does arrive.

Passing out mail once or twice a day is only one of the postal functions performed by the post office staff. Both at sea and in port postal clerks keep the mail coming and going at a steady flow. This requires considerable energy and a slight touch of magic. Sometimes it's like a juggling act.

There are times at sea when postal clerks are selling stamps and money orders in the post office, shuttling incoming and outgoing mail on the flight deck, and receiving and dispatching mail to other ships by highline transfer almost simultaneously.

Work doesn't slack off in port. There is even more ground to cover, with postal clerks traveling to local airports and train stations to dispatch mail, and riding boats back and forth between the ship and beach to carry incoming and outgoing mail.

Back at her home port of Norfolk after a seven-month Med cruise, *Independence* has a postal gang that looks back with pride on a job well done. During the deployment the post office crew canceled an average of 3200 letters and dispatched an average of 632 pounds of various classes of mail a day. They received, sorted and delivered an average of 1480 pounds of mail each day for the seven months.

During the three weeks before Christmas, over 42,000 pounds of mail was received.

Besides writing over 700,000 letters home while in the Med, *Independence* crewmen purchased $55,000 worth of stamps and bought over $1 million in money orders.

—LTJG M. E. Benson, USN

One Thing Leads to Another

On Saturdays, while many U. S. Navymen in Japan are off on sightseeing jaunts or just taking it easy, John McLaughlin, CTSN, teaches English to 150 Japanese students at the Obirin Gakuen Junior College near Tokyo.

McLaughlin, who completed his high school education in the Navy, has no special training or teaching experience. He started by teaching English to a few students who sing in the chapel choir at Kamiseya, where he is stationed. The classes were held each Sunday after church. They began as Bible classes, and at the same time provided a means of learning English.

At the college, McLaughlin teaches primarily pronunciation and vocabulary. He has three classes each Saturday, with 50 students per class, and divides the students into ability groups. The more advanced students also receive a smattering of composition.

The English lessons are not considered part of the regular college curriculum, and no credit is received. The students just want to learn the language.

McLaughlin accepts nothing for his services, and the college provides the classroom space. The young teacher prepares his own lesson plan and takes the minor cost involved out of his pocket.

Meanwhile, he still meets with the original Sunday group, even though he has taken on new responsibilities. In fact, one of the Bible class students was instrumental in getting McLaughlin started at Obirin Gakuen. When the directors of the college heard of McLaughlin's effectiveness in teaching the Bible class, they invited him to try the classes at college.

McLaughlin says he was surprised by the large number of students who joined his classes, but he was, of course, pleased.

He plans to enter college this fall. He wants to become a teacher.

Airdale Submariners

Submarine billets for brownshoes are few and far between. But it's always nice to know how the other half lives, so several Patrol Squadron One Navymen embarked in USS *Rasher* (AGSS 269) for a short cruise last February.

And while the wing-wearing officers and men rubbed shoulders with the dolphin-toting black shoes, the sub was hunted by patrol planes from NAS Whidbey Island, Wash.

It was an educational trip. The men learned first-hand about submarine evasive tactics, concepts and limitations. The experience may well come in handy some day if, while in a patrol plane, the aviators must attempt to second-guess an enemy submarine commander.

According to the airdales, the six-day cruise was not an unmixed blessing. When the submarine was on or near the surface—which was a good part of the time—the aviators and aircrewmen had little stomach for submarine life.

The food was good, however. Four meals daily are served aboard *Rasher*, and the cook is always willing to come across with a snack or two between times.

But once an airdale, always an

airdale, and when *Rasher* docked at Port Angeles, the guests were more than happy to return to their usual occupations.

Ranger Grows Larger

Always a large ship, USS *Ranger* (CVA 61) has a slightly wider flight deck than she had last year. During a recent six-month overhaul at San Francisco Naval Shipyard, eight feet were added to her angle deck to make room for additional arresting gear.

Ranger is now over 1070 feet long, 270 feet wide and displaces up to 80,000 tons when fully loaded.

While in the yard, *Ranger's* eight boilers were overhauled and repaired, and the ship's evaporators were modified to increase her fresh water capacity.

A Van Zelm Bridle Arresting System was incorporated into the ship's four catapults and the two forward cats were adapted to the nose wheel launching system.

An aircraft engine welding shop was installed and briefing spaces and avionics facilities were improved. Five new arresting gear engine systems were added in the after part of the ship.

Yorktown Receives Overhaul

USS *Yorktown* (CVS 10) has been overhauled at Long Beach Naval Shipyard. The work included installation of a new radar system and electronic training devices to increase the effectiveness of the ship in its antisubmarine mission.

The Fighting Lady entered the yards last October after returning from a Far East cruise. While in the yards, she spent over a month in drydock.

Yorktown, homeported in Long Beach, is scheduled to make another Far East cruise later this year. This will be the fifth such cruise for the famed World War II carrier since she was designated an antisubmarine warfare carrier.

Neat, Well-Rounded Figures

As the years roll by, naval aviation has an opportunity to add up some noteworthy accomplishments and strike a total. Here are a few examples of how time will tell:

• Patrol Squadron Four, which has been based at Naha Air Base, Okinawa since 1956, recently celebrated 50,000 flying hours in SP-2 *Neptune* patrol bombers without an accident. The squadron has been racking up accident-free hours since February 1959.

• Corpus Christi's Training Squadron 31 had flown more than 65,000 accident-free hours by the first of December last year.

• USS *Saratoga* (CVA) 60) recorded her 80,000th landing. It was made by an A4C *Skyhawk* on 24 Jan while *Saratoga* was participating in Operation Springboard in Caribbean waters off San Juan, Puerto Rico.

• USS *Midway* (CVA 41) counted the 111,000th landing on her flight deck recently. The touchdown was made by an A-4E *Skyhawk.*

• USS *Essex* (CVS 9) had a four thousand lead over *Midway* when she recorded her 115,000th arrested landing.

• Even a comparative youngster like USS *Constellation* (CVA 64) counted 18,000 arrested landings.



NEWLY PROMOTED Captains Roger K. 'Lou' Knight (left) and Jack D. Baird receive oversized stripes from Captain William P. Tanner, Jr., CO, NAS Los Alamitos, Calif.



OLD WITH THE NEW — Attack aircraft carriers *USS Shangri La* (CVA 38) and *USS Enterprise* (CVAN 65) are anchored at Suda Bay, Crete.

• USS *Hancock* (CVS 19) discovered all the pilots of its Fighter Squadron 216 had completed 100 arrested landings on the same aircraft carrier.

Every carrier, of course, has its own figures. These aren't necessarily the greatest but they are representative, and they indicate the Navy's carriers are doing more than just carrying.

Jupiter Bids Farewell

After more than 22 years' active service, USS *Jupiter* (AVS 8), the Navy's only aviation stores ship, is being mothballed.

Jupiter was transferred to the Reserve Fleet early this month after decommissioning ceremonies at Bremerton, Wash.

Through her long career, *Jupiter* has been involved in cargo supply operations too numerous and too varied to list. And, though she's been chiefly concerned with nuts and bolts, she's seen plenty of bullets.

Built in 1939 as a C-2 cargo ship, *Jupiter* was first named SS *Flying Cloud.* She had been renamed SS *Santa Catalina* when the Navy acquired her in June 1941 for service as an AK. She was renamed USS *Jupiter* (AK 43) in August 1942 upon her commissioning, in keeping with the tradition of naming cargo ships after astronomical bodies.

Less than a month after her commissioning, *Jupiter* delivered her first load of cargo at Pago Pago, Samoa, and during the war years that followed served in virtually every

area of important Pacific operations. She saw her first action in the form of "Washing Machine Charlie" aircraft raids while working cargo between Tulagi in the Solomons and Guadalcanal. She participated in her first invasion when preparations were made for landings at Tarawa.

Over-all, *Jupiter* covered 135,218 miles during World War II. She carried and delivered thousands of tons of supplies, and moved hundreds of troops to various fronts. She crossed the equator 14 times, and earned six battle stars on the Asiatic-Pacific Area Service Ribbon.

Jupiter's battle stars were for the following: Gilbert Islands Operation (13 November to 8 Dec 1963); Marianas Operation, Capture and Occupation of Saipan (11 June to 10 Aug 1944); Western Caroline Islands Operation, Capture and Occupation of Southern Palau Islands (6 September to 14 Oct 1944); Leyte Operation, Landings (10 October to 29 Nov 1944); Iwo Jima Operation, Assault and Occupation of Iwo Jima (15 February to 16 Mar 1945); Okinawa Gunto Operation, Assault and Occupation of Okinawa Gunto (24 March to 30 Jun 1945).

Returning to the U. S. after the war, *Jupiter* was converted to the aviation supply ship category and redesignated AVS 8.

After a relatively brief period in a post-war decommissioned status, *Jupiter* was recommissioned and within three months was again in the Far East. This time she provided aviation material support for U. S. carrier aircraft involved in the Korean conflict.



CLASSROOM STRATEGY — By means of an electronic war simulator, Naval War College students gain experience in direction of Fleet exercises.

For the past nine years, *Jupiter* operated out of Yokosuka, Japan, providing the U. S. Seventh Fleet with aviation supplies. During this period she logged more than 250,000 miles while visiting Okinawa, Guam, Hawaii, Taiwan, Hong Kong, Singapore, and ports in the Philippines.

The AVS has been noted for her unusual stock cargo of some 19,000 different aviation supply items, ranging from aircraft canopies, doors, wings, radomes and helicopter blades, to the tiniest washers, nuts, and bolts.

As *Jupiter* departed Yokosuka for the last time she flew a homeward bound pennant that extended over her wake. The pennant had a field of 17 stars (representing one 12-month and 16 continuous six-month cruises), and was 168 feet long (one foot for each man who had served on board more than a year).

Following the decommissioning ceremonies at Bremerton, *Jupiter* will be moved to Olympia, Wash., and retirement to the Reserve Fleet.



WESTWARD IN '64 — *USS Mount McKinley* (AGC 7), having served in the Atlantic since 1956, is due to rejoin Pacific Fleet later this year.

Meet Me in the Med

USS *Elokomin* (AO 55) crew members may have enjoyed a vacation on the French Riviera, but they undoubtedly earned it.

During the oiler's recent Med cruise the ship steamed more than 24,000 miles, serviced 250 ships alongside and transferred approximately 33 million gallons of fuel.

While in port the Navymen participated in the people-to-people program in a number of ways, which included delivery of clothing to needy residents of Cartagena and the painting of a school for deaf children in Palma.

While in the Mediterranean the ship also visited Cartagena, Rota and Barcelona in Spain; Naples and Taranto in Italy; Cannes in France and Palma De Mallorca in the Balearic Islands. During last Christmas

holidays, when the ship was anchored at Cannes, many of the crew who were not on the Riviera visited Paris, England, Germany and Switzerland.

New Division for PhibLant

The Atlantic Fleet Amphibious Force has a new division composed of five World War II tank landing ships. The purpose of the new LST division is to consolidate training and operational matters of this class ship.

Tank Landing Ship Division 41 is the only one of its kind in PhibLant and is composed of uss *Dodge County* (LST 722), *Duval County* (LST 758), *Cheboygan County* (LST 533), *Churchill County* (LST 583) and *Middlesex County* (LST 983)—all ships which were recommissioned during 1961. (There are similar divisions in the Pacific.)

The LSTs were among more than 1000 similar vessels constructed during World War II, a type which Sir Winston Churchill characterized as being the greatest single contribution to solving the problems of landing heavy vehicles over beaches.



A HOME RUN — After tour of duty with the Sixth Fleet in Med, the oiler *USS Elokomin* (AO 55) starts on journey from Naples to Norfolk.

Sweeps Return Home

Five minesweepers of the Pacific Mine Force have arrived back at Long Beach Naval Station after a 7500-mile return voyage from a seven-month Far East tour.

The sweeps, all of Mine Division 73, are uss *Esteem* (MSO 438); *Gallant* (MSO 489); *Conquest* (MSO 488); *Pledge* (MSO 492); and *Illusive* (MSO 448).

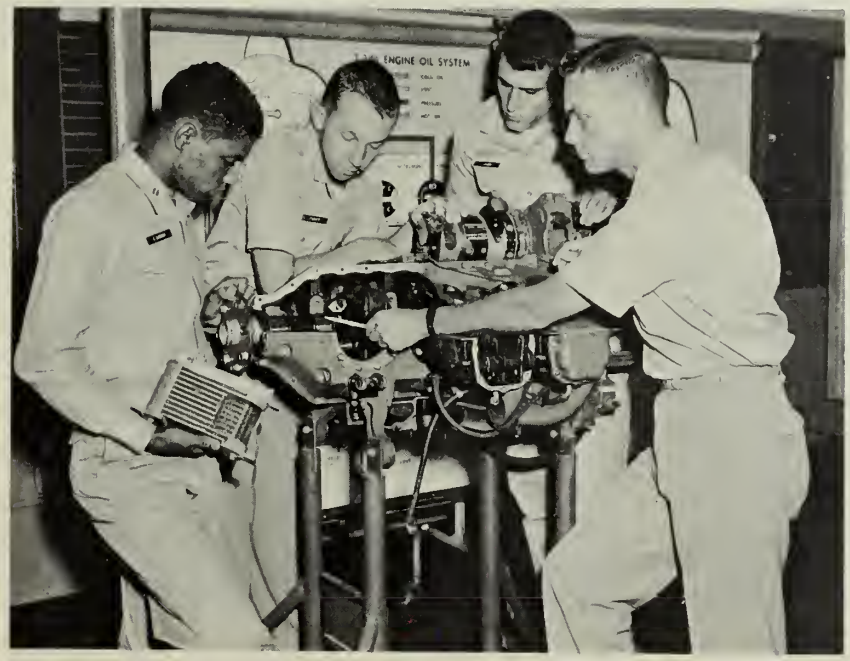
They have undergone extensive minewarfare readiness training while serving with the Seventh Fleet in the western Pacific.

During their deployment, the sweeps participated in minesweeping exercises with the navies of South Korea, Taiwan and the Philippines. In several instances, navymen of foreign navies trained aboard the U.S. ships during mine countermeasures operations.

The five ocean minesweepers also participated in a goodwill program which included port visits in Japan, the Philippines, Taiwan, and the British Crown Colony of Hong Kong.

Carrying cargoes of "Operation Handclasp" clothing and supplies for distribution to the needy in the Far East, the minesweepers were welcomed in many ports in which U. S. Navy ships are a rarity.

Conquest and *Esteem* claim to be the first U. S. Navy ships to visit the towns of Hiroo, Rumoi and Mombetsu on Japan's northernmost island of Hokkaido, while *Pledge* and *Esteem* think they have made the first call at the Philippine port of Pagadian.



GROUND WORK—Future pilots get the word on parts of plane they will fly.

Val Will Replace *Skyhawk*

Work will begin soon on production of a new attack aircraft to be used by the Navy and Marine Corps.

The new plane is named *Val*, and will be designated A7A.

Val is slightly larger than the A4E *Skyhawk*, which she'll eventually replace in Fleet operations. (*Val* will carry a larger payload than *Skyhawk* nearly twice as far.)

The A7A will be powered by a non-afterburning version of an engine now under development.

SERVICESCOPE

Brief news items about other branches of the armed services.



USAF *MINUTEMAN* missile launched from Cape Kennedy, Fla., leaves glowing trail as it streaks over Atlantic.

TO SOME, SHAKE, RATTLE AND ROLL may be a song but at Wright-Patterson Air Force Base, Ohio, it is a way of acquainting astronauts with spacecraft vibration.

A six-degree-of-motion simulator (sixmode, for short) is scheduled for completion there in July. It will subject a pilot strapped into a model cockpit to the roll, pitch, yaw, up-and-down, side-to-side, backward-and-forward motion—all simultaneously—such as astronauts might encounter in both the launch and re-entry stages of space travel.

For the non-space oriented, scientists say a ride in the sixmode will be something like riding a raft in a hurricane.

In addition to shaking up astronauts, scientists also hope to improve spacecraft seating arrangements, instruments and controls so astronauts can perform tasks even during periods of extreme vibration.

The sixmode will test astronauts' responses to space flight and provide a realistic proving ground for future equipment designed for manned spacecraft.

★ ★ ★

A NEW ANTI-TANK MISSILE which is electronically guided along the gunner's line of sight, much as though there were an invisible gun barrel stretching to the target, is being developed for the Army Missile Command, Redstone Arsenal, Ala.

The missile is called *Tow* (Tube-launched, Optically-tracked, Wire-command link guided missile).

The *Tow* system is being developed for use as a heavy assault weapon that regular Army field troops can use without special training as missile technicians.

Here's how it works: A *Tow* missile, still enclosed in its shipping container, is inserted into a tripod-mounted launch tube. The container forms an extension of the launcher. (The missile has stubby wings and control surfaces that remain folded while in the launcher.) Electrical and mechanical connections are made automatically as the container is clicked into place.

After launching, the missile follows a boost-coast trajectory using two separate boosters to obtain the required velocity. One motor powers the missile while it is still in the launcher. To insure safety for the gunner, the *Tow* coasts for a while after leaving the tube before the second booster speeds it to its target.

As the missile travels through the air it unreels two hair-thin wires, through which it receives steering signals.

The gunner aims a telescopic sight at the target. The missile automatically follows his line of sight.

If the target is moving, the gunner tracks it with his sight, and electronic signals correct the missile's course.

Tow can be used against tanks, armored vehicles and gun emplacements. It is expected to provide a major boost in firepower for infantry units because of its powerful explosive force combined with high accuracy at both close and long ranges.

The new system is portable—it can be carried on various types of vehicles such as jeeps and armored personnel carriers, or on helicopters. Total weight of the system (less missile) is approximately 160 pounds. For easy carrying, the unit can be broken down into four parts.

In demonstration tests conducted at the Army's Aberdeen Proving Grounds in Maryland recently a *Tow* missile hit within one foot of the center of a tank-sized target more than a mile away.

★ ★ ★

A 350-FOOT COAST GUARD CUTTER is now under construction on the east coast. The longest ship ever built by the Coast Guard, the cutter is the first of 38 major vessels which will replace aging units during the next 10 years.

The new cutter will be powered by gas turbines and diesel engines. The diesels will be used for cruising speeds up to 20 knots, and when more speed is required, the gas turbines will provide a maximum of 29 knots.

Complete pilot house control, variable pitch propellers, and a bow thruster will make the cutter the most maneuverable ship of its size.

The ship will carry 15 officers and 150 enlisted men. It will be equipped with a data computer system, a helicopter deck, oceanographic labs, and a closed circuit television system.



AN ARTIST'S VIEW—This 350-foot cutter, now under construction, is longest ship ever built by Coast Guard.

AT HOLLOMAN AIR FORCE BASE, N. Mex., there is a school for chimpanzees which has 83 students. The chimps are there to learn to fly spacecraft. Two simian graduates of the school, Enos and Ham, have already been aloft.

Experts say spacecraft controls can be simplified to a point at which no activity will be necessary, except to keep a cross within a circle.

The star pupil at the chimpanzee school is six-year-old Bobby Joe, who is a whiz at keeping a cross inside a circle by using two hand levers to control the vertical and horizontal movements of the cross.

When Bobby Joe keeps the cross inside the circle for two ten-second periods, he is rewarded with a banana-flavored food pellet. His skill is evident in the 225 pellets he puts away during a typical five-hour shift.

The other students at the school aren't quite as adept as Bobby Joe at piloting spacecraft. One day, Bobby Joe—probably feeling sympathy for his co-workers' lack of banana pellets—released the combination lock on his cage; pulled it from its slots and sneaked into the room where the banana pellets were stored.

He grabbed a sack of pellets, ran down the row of cages containing his fellow students, and tossed large handfuls of the pelletized bananas to each while his handlers were in hot pursuit.

Bobby Joe's generosity, however, exceeded his good sense. When he got around to sating his own appetite, the supply of banana pellets was exhausted.

★ ★ ★

HELMET-MOUNTED infrared binoculars which are designed to give their wearer better night vision are being tested by the Army.

The binoculars, which are to be used while driving, have two image converter tubes mounted in them. Power is supplied by a high-voltage unit mounted on the rear of helmet. The unit weighs about one pound.

Illumination is provided by invisible infrared rays from filtered headlamps of the vehicle.

The idea is not new. The Army has already developed hand-held infrared binoculars, the metascope, a weapon sight and other infrared viewing equipment. The helmet-mounted binoculars will enable the night driver to use both hands for driving.

★ ★ ★

A MISSILE BATTALION that can "shoot and scoot" has been deployed to Europe to provide heavy artillery support for the Seventh Army.

Equipped with the highly mobile *Pershing* missile system, which can be put into action quickly and be back on the road shortly after firing, the Fourth Battalion, 41st Artillery, has arrived in Germany to replace the *Redstone* missile force.

The *Pershing* is a two-stange, solid propellant missile that's 35 feet high and guided inertially. Its range is 400 miles. The missile is normally transported on lightweight, tracked vehicles, but can be airlifted by helicopter.

The 635-man Fourth Battalion is comprised of four *Pershing* firing batteries, each of which can be quickly deployed to shoot and scoot.



MISSILE LAUNCHER—Army's air transportable armored reconnaissance vehicle is equipped to fire the *Shillelagh*.

A COMPUTER SCHOOL for high-ranking officers and civilians has been established by the Department of Defense. It was opened after a recent study showed that computer technology, now important to military operations as well as administration, has developed since most senior executives completed their formal education.

Younger men usually receive computer familiarization courses in service academies, postgraduate schools and industrial courses.

The initial Computer Institute classes will be limited to generals, admirals and their civilian counterparts. They will attend one week. Later this year a longer course will probably be added for the ranks of colonel, Navy captain and equivalent civilians.

Students will operate desk-size training versions of large computers during the course. The experience, combined with normal classroom instruction, will result in a better understanding of the capabilities and limitations of computers, as well as the hardware features which make some computers more suitable than others for solving certain types of problems.



NEWLY DEVELOPED grenade launching system is mounted on Army cargo truck as defense against ambush.

THE BULLETIN BOARD

Now's Your Chance To Join Navy's Fleet of Nuclear Ships

FOUR MORE RATINGS—MR, AD, CM and UT—have been added to the list of those from which men may be drawn for training in the shipboard nuclear power program. If you're in one of these ratings, or in any other nuclear training source rating (others are ET, IC, EM, MM, EN and BT), now's the time to apply. Here's why:

- The Fleet of nuclear-powered ships is growing rapidly.
- The need for engineering personnel trained in nuclear power theory and operation is increasing.
- Men with a background in engineering fields are needed now for nuclear power training.

The four new nuclear training source ratings have been added to the list to help meet these expanding personnel requirements. If you're in an eligible rating, and are interested in looking at what this important and challenging program has to offer, here's some background.

You may volunteer for training in either the submarine or surface ship program. (BT personnel are eligible for surface ship nuclear training only.) The training phase takes at least one full year, with emphasis on powerplant theory and operation.

If you volunteer for duty on board a nuclear sub, and are not already qualified in subs, you go on to submarine school.

Although you may apply for either submarine or surface ship training, not all those who request nuclear sub duty are assigned to such. At present, personnel requirements are greatest for surface ship duty, and chances are you'd pull duty on board a nuclear-powered surface ship. However, after 18 months on board your surface ship, you could apply for sub duty, and chances would be good that you'd get it.

Present plans call for a new shipboard nuclear power training class to convene in July. If you wish to enter the program and make this class, your request should be submitted as soon as possible.

If otherwise eligible for nuclear training, you will not be required to have served on board your present command, sea or shore, for any specific period.

In addition to being in one of the eligible source ratings (any pay grade E-2 through E-6), here's what's required if you wish to apply for training. You must:

- Be not more than 25 years of age.
- Be recommended by your commanding officer.
- Have a minimum combined GCT-ARI of 110. (The combined GCT-ARI for MR, AD, CM, UT, MM, EN and BT personnel must be 105 or higher, in addition to having a minimum Navy Standard Score of 53 in the Advanced Technicians Test MATH.)
- Be a high school graduate, or have completed two years of high school and have the GED equivalent of a high school diploma.
- Be physically qualified, as outlined in the *Manual of the Medical Department*.
- Have at least 36 months' obligated service at time of reporting for instruction.
- Extend or reenlist to insure at least six years' total service, if you've completed less than three years' service upon reporting for training.
- Have a clear record for the 12 months before application, and not more than one minor offense recorded over the latest 24-month period. (Those convicted of serious offenses are not eligible.)
- Have all evaluation marks of 3.0 or above for two years before entering school.
- Be cleared for Secret.

Concerning the last point, a National Agency Check request should be initiated at the time you submit your application, assuming you meet all the other eligibility requirements. This security check must be requested before you are transferred for training (unless, of course, one has already been completed).

You will be interviewed by an officer to determine whether you understand the program and are motivated for training. Your CO should attach a completed interview form to your application.

Specific information should be included. You should note which program you desire to enter (surface or submarine), your Seavey-Shorvey status, whether you have been selected for officer status or have previously been selected for a nuclear program, your level of education, test scores, obligated service, and security clearance information.

Your request should be submitted on an Evaluation Report (NavPers 1339), via command channels, to the Chief of Naval Personnel (Pers B-2131).

If you wish to make the July class, submit your request as soon as possible to allow time for processing and, if you're selected, your arrival at school in plenty of time.

After the Chief of Naval Personnel reviews your request you will be advised of the action taken. If you're selected, but can't be assigned to training right away, you will be placed on a waiting list for assignment at a later date. It's not necessary to submit another request.

A change in rating will be part of the program if you're an MR, AD, CM, or UT. Men in these ratings who successfully complete the training courses are converted to machinist mate (in equal pay grade).

All-Navy Cartoon Contest
LCDR Billups E. Lodge, USN



"Better check your loran set, Chief—according to the navigator's celestial fix, we're in Tapeka, Kansas."

Here's one final point to consider if you have trouble making up your mind: Those who complete nuclear power training may draw proficiency pay of $75.00 (surface ship duty) or $100.00 (submarines) each month. In addition, if you're accepted for nuclear sub duty, you may draw submarine pay of from $50.00 to $100.00 monthly, depending on your pay grade.

Details on these and other aspects of the nuclear ship training program are contained in Chapter 11 of the *Enlisted Transfer Manual.*

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 4 — Announced that Guantanamo is a restricted area within the meaning of *Joint Travel Regulations* for members whose dependents are not on station and those en route or ordered in future.

No. 5—Further discussed family separation allowance restrictions.

Instructions

No. 1611.13—Introduces the new Report on the Fitness of Flag Officers, NavPers 310A (3-64), and provides instructions governing its preparation and submission.

No. 6100.6—Amplifies weight control measures earlier cited in SecNav Inst. 6100.3 and establishes a means whereby commands may enforce weight reduction for those enlisted personnel who are obese.

Notices

No. 1320 (28 February) — Provided information pertaining to orders to personnel in connection with construction and fitting out of new construction nuclear-powered ships.

No. 1211 (4 March)—Advised commands of the distribution of the *Manual of Navy Officer Classifications* (NavPers 15839A) and referred to developments in the Navy Officer Classifications System.

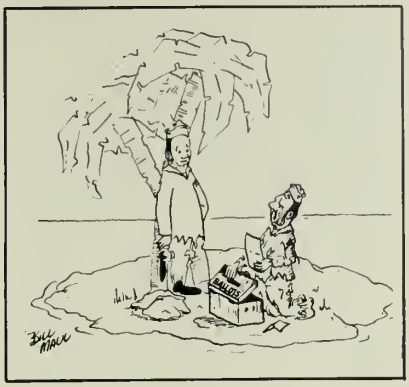
No. 1520 (2 March)—Offers information concerning the scope of the Navy postgraduate and undergraduate education programs planned for the academic year 1965-66 and provided insrtuctions for submission of preferences.

No. 1510 (12 March)—Announced a list of active duty enlisted personnel who have been provisionally selected for the NESEP program.

No. 3590 (17 March)—Discussed procedures in connection with Regular and Reserve participation in competition in arms for 1964.

No. 1418 (1 April)—Announced the availability of examinations to be used for advancement in rate to pay grade E-3 of active duty personnel.

All-Navy Cartoon Contest
William R. Maul, CT1, USN



"You were selected 'Sailor-of-the-Month'. I was named for 'Best Military Appearance'!"

Applications Considered for Dental Corps Candidates

Applications for appointment into the Regular Navy Dental Corps are now being considered upon receipt by the Naval Examining Board. In the past, applications were accepted at any time but were considered by the Naval Examining Board only twice a year, in February and in August.

Continuous consideration applies to requests both from civilian dentists seeking USN appointment and to Reserve officers who want to augment into the Regular Navy.

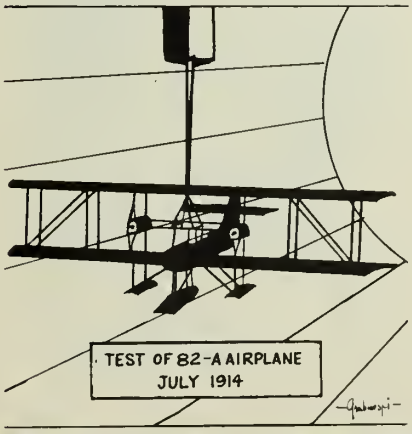
HOW DID IT START

50 Years for Aero Lab

One day last March three pioneers of early naval aerodynamics returned to the David Taylor Model Basin in Maryland to help celebrate the 50th anniversary of the Aerodynamics Laboratory.

Mr. J. A. McCrary, 89, Captain Walter S. Diehl (USN, Ret.), 70, and Dr. John F. Victary, 71, had helped nurse the lab through its first few decades.

Captain Diehl was in charge of the Navy's work in aerodynamics and hydrodynamics from 1918 until 1951, both in the old Bureau of Aeronautics and in the Aero Lab. Dr. Victary worked in the lab when it was first started, and later became the first paid member of the National Advisory Committee for Aeronautics, which was the forerunner of NASA. Mr. McCrary was director of the aerodynamics lab from 1930 to 1942.



Naval aviation began in 1911 with the purchase of the A-1 which was the Navy's first airplane, and three years later the Navy's first wind tunnel was built at the experimental model basin at the Washington Navy Yard. The basin was later renamed for its designer, Captain David Taylor.

The original eight-by-eight-foot tunnel could provide a wind velocity of 54 miles per hour, though its normal operating output was about 40 mph. This first tunnel remained in operation for 30 years.

As aerodynamics became more important to the Navy the original lab was expanded until it outgrew its allotted space. In 1936 Congress authorized plans for a new model basin and wind tunnels, and in 1944 the aerodynamics lab was officially transferred to Carderock, Md.

Today, wind speeds from 0 to Mach 10 can be attained in the subsonic, transonic, supersonic, and hypersonic wind tunnels in the Aero Lab.

There's A Wealth of Education in the Navy's School System

THE NAVY HAS a long-standing reputation for its educational opportunities. Navymen can choose between class A, B, C, and P schools, academies, colleges, and postgraduate courses.

But the Navy's reputation and the availability of school quotas are almost completely worthless if you don't know exactly what schools are in operation, what material they cover, what you must do to qualify, and how you go about getting your hands on the right set of orders.

This information is available, in easily understandable form, in the *Catalog of U. S. Naval Training Activities and Courses* (NavPers 91769-F). Every Educational Services Office has one.

Every school offered by the Bureau of Naval Personnel is listed in the catalog. Under the heading of each school you can find such items as quota information, security classification, and requirements, including battery scores, physical condition and necessary obligated service. Convening dates are listed in the publication's annex.

Although the book is a handy ready reference for the Navyman who knows exactly what he wants, it's probably even more valuable if you have no designs on any particular school. A few minutes spent browsing through the catalog is bound to give you a few ideas — some of which could easily materialize.

The catalog lists over 350 courses. Some are highly technical—the book lists 15 courses available to electronics technicians at the Great Lakes ET "C" school, covering electronic instruments, computer basics, and ECM maintenance.

Other schools deal more with techniques than with science. Class "A" illustrator draftsman school, available to most E-2 and E-3 Navymen with GCT-ARI combinations of 105, offers instruction on basic drafting skills including freehand illustration, projection, commercial art, charts, graphs, posters and cartoons.

The pub is divided into four parts. They are:

• Part A—This section refers to schools for commissioned officers, and contains information on Advanced Command and Staff Schools, the U. S. Navy Postgraduate Schools and Courses, special programs and miscellaneous officer training.

Eligibility requirements, quota information and scope of instruction are listed for each school. Part A of the catalog can be important to the officer who is interested in continuing his education and increasing his chances of promotion.

• Part B — This section, which covers officer candidate training activities, is practically guaranteed to enthuse any ambitious enlisted man. It lists eight different ways for Navymen to earn a commission and in some cases, a diploma as well. Opportunities for enlisted women are described.

Types of commissions offered, requirements, and background information may be found for each school.

• Part C—This chapter will probably interest more Navy personnel than any other. It deals with the class A, B, and C schools available to enlisted men and women.

Here you can find listings which range from recruit training to plastic pipe repair for shipboard damage control personnel. If you're musically inclined, for instance, you can find a section on the Class A School of Music. According to the publication, this school offers private instrumental lessons, concert and dance band rehearsals, musical theory, musical survey and sectional rehearsals. It also explains that you don't have to be a musician or musician striker to apply—the school is open to many ratings, including quartermasters, boatswain's mates, and yeomen.

R. L. Silva, PN3, USN



"Nice shooting, Sir!"

Or, if your interests are mechanical, you can find out all about the Navy's welding, teletype maintenance, and steelworker's schools.

• Part D—This section of the catalog, titled Functional Training, applies to both officers and enlisted men. Functional schools usually deal with the performance of specialized tasks which are not normally included in officer and enlisted training, such as instruction on new or advanced weapons. Many of the courses are slanted for the group or team situation.

Information on the nuclear programs, mine warfare school, courses on damage control and advanced undersea weapons training is included, to mention only a few.

If, while looking through the catalog, you find a school which interests you and for which you qualify, don't stop at window-shopping. An officer in BuPers may be trying to find the right man to fill a quota for that particular school. But he'll never know you're interested unless he receives your quota request.

Once you know what you want, it is not difficult to apply for a quota—especially when you use the catalog. See your Educational Services Officer, point out the school which interests you, and he can probably give you a little additional information. If you are qualified, he'll draft a quota request, arrange for your CO's endorsement, and send it off to the proper authority.

You never can tell. You may solve some assignment officer's problem.

Three Correspondence Courses Set for Enlisted Personnel

Three new Navy correspondence courses have been issued by the Naval Correspondence Course Center, Scotia, N. Y. They are:

• *ECC Patternmaker* 3 & 2, NavPers 91549-1A

• *ECC Aviation Machinist Mate R* 1 & *C*, NavPers 91608-1

• *ECC Instrumentman* 3 & 2, NavPers 91383-C

Stewards' February Exams Rescheduled for 19 May

All second and third class stewards who took the February 1964 examination for advancement in rating, including those who took substitute exams, will have to take it over if they hope to be advanced.

It has been determined that both the SD2 and SD3 exams for this period were compromised. It was therefore necessary to invalidate all the examinations to protect the integrity of the advancement system.

In fairness to all personnel, and to provide a normal advancement opportunity, substitute examinations are being made available. Those who participated in the February exam are eligible to participate in the substitute exam, (series 35A), provided the CO's recommendation has not been withdrawn.

Substitute exams will be automatically shipped to all commands that ordered the February stewards exam. Commands should not request them.

The new exams will be administered 19 May. It is anticipated that only in the most unusual cases will a request for delayed substitute examinations be granted by the Bureau of Naval Personnel.

Administration of the exam will be as usual, in accordance with current basic regulations. However, requests for delayed substitute exams must be forwarded to BuPers instead of the Exam Center.

NavPers Form 624, on which is recorded multiple computation data, should also be marked especially for this substitute exam by placing "35A" in the upper left corner with a marking pencil.

All CNARESTRA TARs will be administered the same examinations as active duty personnel and will compete for vacancies among themselves. Those examination returns will be submitted separately.

After the exams have been administered, they will be returned by air mail immediately to prevent delay in advancement.

Bonnie Dick Still Spry

Though she's pushin' 20, uss *Bon Homme Richard* (CVA 31) still has plenty of moxie. The old *Essex* class carrier, commissioned in November 1944, is presently on a seven-month deployment in the Far East.

All-Navy Cartoon Contest
LCDR Billups E. Lodge, USN



"I bid one corpen."

She's serving with the Seventh Fleet as flagship of Carrier Division Five on a busy schedule.

Uniformed Services Almanac Tells All

The 1964 edition of the *Uniformed Services Almanac* is on the newsstands. In one condensed paperback volume, this annual almanac again presents a valuable guide to many items of interest for all military personnel.

The *USA* has sections on life insurance and Social Security, dependents' medical benefits, retirement benefits, home buying, payment of federal and state taxes, veterans' benefits, shipment of personal property, plus various charts used in computing pay, allowances and deductions.

It lists the top officials in each service and the Department of Defense, members of Congressional committees which deal with the services and veterans' benefits, and the Joint Chiefs of Staff. It gives statistics on service personnel on duty in war and during peacetime, casualties, educational levels of active duty personnel, DOD expenditures, and a general breakdown of the numbers of personnel, by service, who are in each pay grade, their average ages, where they are stationed, how many are married, and other related information.

WHAT'S IN A NAME

NSC Norfolk, Navy's Oldest

Norfolk's Naval Supply Center celebrated its 45th birthday last March. It has grown, during four and a half decades, from a few storehouses constructed on the site of the 1907 Jamestown Exposition to a giant with more than 150,000 customers on land and sea. They range from sailors of the Second and Sixth Fleets to hundreds of shore activities and that portion of the U. S. Navy supporting the North Atlantic Treaty Organization.

NSC Norfolk is the Navy's oldest supply center. The depot's growth began in the twenties. It slowed down in 1929 and in the depression years that followed when the nation's economy faltered, but in 1941, World War II gave its growth a big spurt. NSC Norfolk acquired new warehouses and piers to handle the heavy demands of a Navy engaged in global war.

Although many military installations were closed with the coming of peace, the Norfolk Naval Supply Center still had a tremendous job to do. Military supplies which had been shipped overseas in the expectation of continued hostilities were being returned, and had to be screened and restocked before the depot could return to normal peacetime operations.

Although it was removed from the Korean conflict by the width of the Pacific and the breadth of the North American continent, the Norfolk Supply Center was called upon to supply Navy ships reactivated from the Atlantic mothball fleet.

On its forty-fifth anniversary, the Norfolk Naval Supply Center resembles a large corporation. An electronic data processing system operates the year around to relieve it of much of its former paper work.

The center maintains a multi-million dollar inventory with which it conducts its world-wide business. Its job: to supply the Navy with the essentials for keeping the peace as, in the past, it has supplied the Navy with the means of waging war.



Annual Report Points Up Role of Your Navy Relief Society

EACH YEAR there is an annual call for voluntary contributions for the Navy Relief Society. The call is answered by outright donations, balls, carnivals, style shows and athletic events. The drive usually nets well over $1,000,000.

So what happens to the cash?

Any Navy Relief bookkeeper could give you an accounting down to the last penny but let's face it: The Navymen are important, not the paperwork. And, to get an idea what the Society does for the sailor, you must look at case histories. Here are a few from the '63 files.

Last year the society closed a case which began back in 1958, when a Navyman was killed in an aircraft accident. He left behind a wife and two children.

The Social Security and dependent survivor's benefits which go to a Navy widow can certainly come in handy, but are not always enough to raise a family. Consequently, the young mother decided to attend college and qualify as a school teacher.

A determined woman, she worked part time, cared for her children and attended classes. But, one year before she was due to graduate, her money ran out. She then wrote to Navy Relief and applied for a loan.

The Society replied with a grant covering her expenses for one semester. A few months later an additional grant was made, she graduated on schedule, now holds a teaching job, and the future of her family is secured.

Another case involved a Navyman's daughter who had been crippled since birth. Her case was not hopeless, and the doctors felt that her condition could be cured by a series of brain operations. Unfortunately, military hospitals do not perform the type of neuro-surgery required, and civilian brain surgeons are far too expensive for Navy pay.

Without the operations, the girl would be an invalid for life.

Despite his lack of ready cash, the Navyman talked to a doctor who was qualified to perform the operation. The surgeon agreed to charge only half of his normal $2000 fee, and would accept that only to pay for the surgical team which would accompany him during the operation. Also sympathetic, the hospital agreed to lower its prices.

But the total cost still far exceeded the Navyman's ability to pay.

At this point the Navy Relief Society stepped in. A grant was made and two operations were performed —successfully. The girl is now well on the way to recovery.

Then too, are the multitude of cases which involve less money but which are of extreme importance to the persons involved. A Pearl Harbor seaman apprentice receives word that his father has died, and the Society loans him the money for his trip home; an allotment check is lost in the mail and the young family concerned applies for a loan to buy groceries; a mother is too sick to care for her children, and Navy Relief pays for a homemaker until she has recovered.

Retired Navymen who rate care only in military hospitals have benefited by the organization. In 1963 one Fleet Reservist was stricken at home and required emergency surgery at a civilian hospital. The resulting bills were more than the family could possibly pay. They contacted the Navy Relief Society and their request for assistance was answered promptly with checks covering all expenses as a grant.

That's the Navy Relief brand of security.

On the other hand, the society does not spend the entire $1,000,000 on grants or emergency situations. They also spend a good deal of time and money in efforts to prevent financial emergencies. The society maintains that many problems may be prevented by forethought, planning, and perhaps a little added information. Consequently, Navy Relief is prepared to offer expert counseling to any Navyman—before his problem becomes a crisis.

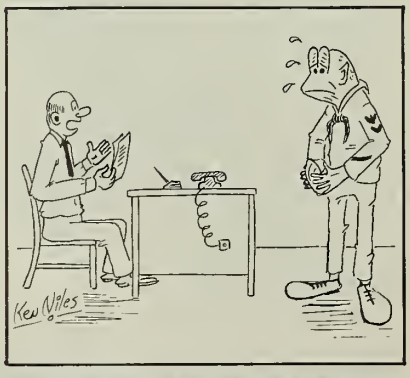
The society's flexibility probably constitutes its greatest usefulness to the Navy family. The organization is available to help in any emergency, and Navy Relief experts can step from minor personal problems to major disasters, as was the case when uss *Thresher* (SSN 593) was lost in the Atlantic.

Immediately after *Thresher* was reported lost, a Navy Relief representative was detached from duty in Newport and sent to assist the Portsmouth Auxiliary. At the same time, the society made available money to be used as needed.

As things worked out, all survivors' claims were processed quickly by the Navy and none of the families were subjected to financial hardship. Nevertheless, the money was available had the *Thresher* families needed it.

Money is always available when a Navy family is in real need. That's what happens to the $1,000,000 donated annually to the Navy Relief Society. (For a list of NRS branches and their auxiliaries, see the February issue of ALL HANDS, page 54.)

All-Navy Cartoon Contest
Kenneth O. Niles, RMC, USN



"I'm sorry Finley, but I'm afraid you'd never make the grade in UDT."

List of New Motion Pictures And TV Series Available To Ships and Overseas Bases

The latest list of 16-mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series available for selection are: The Untouchables and The Dick Powell Show.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Motion Pictures

The Prize (2574) (C) (WS): Drama; Paul Newman, Elke Sommer.

The Four Days of Naples (2575): Drama; Regina Bianchi, Alda Giuffre.

Children of the Damned (2576): Drama; Ian Hendry, Alan Badel.

Pyro (2577) (C): Drama; Barry Sullivan, Martha Hyer.

Kings of the Sun (2578) (C) (WS): Drama; Yul Brynner, Shirley Ann Field.

One Man's Way (2579): Drama; Don Murray, Coral Ohmart.

Love With the Proper Stranger (2580): Natalie Wood, Steve McQueen.

The Man From Galveston (2581): Action Drama; Jeff Hunter, Preston Foster.

The Comedy of Terror (2582) (C): (WS); Comedy; Vincent Price, Peter Lorre.

Gold for the Caesars (2583) (C): Melodrama; Jeffrey Hunter, Mylene Demongeot.

The Ceremony (2584): Drama; Laurence Harvey, Sarah Miles.

A Global Affair (2585): Comedy; Bob Hope, Robert Sterling.

Mutiny on the Bounty (2586) (C) (WS): Drama; Marlon Brando, Trevor Howard.

Mail Order Bride (2587) (C) (WS): Comedy; Buddy Ebsen, Keir Dullea.

The Pink Panther (2588) (C) (WS): Comedy; David Niven, Peter Sellers.

Man in the Middle (2589) (WS): Drama; Robert Mitchum, France Nuyen.

Gunfight at Comanche Creek (2590) (C) (WS): Action Drama; Audie Murphy, Colleen Miller.

The Incredible Journey (2591) (C): Melodrama; John Drainie, Sandra Scott.

Dr. Crippen (2592): Suspense Drama; Donald Pleasence, Samantha Eggar.

The Gentle Art of Murder (2593): Mystery Drama; Pierre Brasseur, Danielle Darrieux.

TV Programs

5331: TV-1 *Dick Powell Show*—Crazy Sunday. TV-2 *The Untouchables*—The Waxey Gordon Story.

5332: TV-1 *Dick Powell Show*—The Losers. TV-2 *The Untouchables*—The Organization.

5333: TV-1 *Dick Powell Show*—Everybody Loves Sweeney. TV-2 *The Untouchables*—Jamaica Ginger.

5334: TV-1 *Dick Powell Show*—Luxury Liner. TV-2 *The Untouchables*—Testimony of Evil.

5335: TV-1 *Dick Powell Show*—Thunder in a Forgotten Town. TV-2 *The Untouchables*—The Nick Moses Story.

5336: TV-1 *Dick Powell Show*—Colossus. TV-2 *The Untouchables*—The Purple Gang.

5337: TV-1 *Dick Powell Show*—Charlie's Duet. TV-2 *The Untouchables*—The Lily Dallas Story.

5338: TV-1 *Dick Powell Show*—Third Side of a Coin. TV-2 *The Untouchables*—Augie the Banker Ciamino.

5339: TV-1 *Dick Powell Show*—Epilogue. TV-2 *The Untouchables*—The Underground Court.

5340: TV-1 *Dick Powell Show*—The Sea Witch. TV-2 *The Untouchables*—Mark of Cain.

5341: TV-1 *Dick Powell Show*—The Judge. TV-2 *The Untouchables*—Masterpiece.

5342: TV-1 *Dick Powell Show*—The Doomsday Boys. TV-2 *The Untouchables*—Kiss of Death Girl.

5343: TV-1 *Dick Powell Show*—Last of the Big Spenders. TV-2 *The Untouchables* — Tommy Karpeles Story.

5344: TV-1 *Dick Powell Show*—Apples Don't Fall Far. TV-2 *The Untouchables*—A Seat on the Fence.

5345: TV-1 *Dick Powell Show*—Special Assignment. TV-2 *The Untouchables*—Mr. Moon.

All-Navy Cartoon Contest
Peter C. Markantes, Jr., USN



"Got a minute, Smith?"

NOW HERE'S THIS

The Ice Crushers

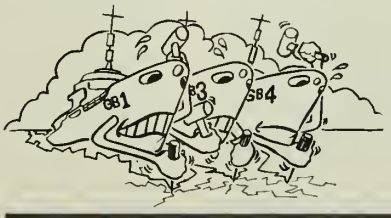
The falling of autumn leaves in the northern hemisphere last year signaled the beginning of spring in Antarctica and the Navy icebreakers USS Glacier (AGB 4), Burton Island (AGB 1) and Atka (AGB 3) began crunching their way through heavy ice to provide a watery freeway for incoming supply ships. As usual, it was no picnic. Here are a few for instances:

On a trip to Hallett Station on the edge of Victoria Land, Burton Island found the Antarctic ice to be 15 feet thick in some places and covered with six feet of soft snow.

At one point in the journey, Burton Island became wedged in the ice for 19 hours and finally had to be blasted free.

All in all, it took the 6500-ton icebreaker five days to crunch through the 334 miles which separated her from her goal.

While Burton Island was carving a channel to Hallett, Glacier was pushing on toward McMurdo. She escorted USNS Chattahoochee (T-AOG 82) and her cargo of one million tons of oil within two miles of McMurdo's storage facilities where Chatahoochee laid a rubber-hose pipeline across the sea ice to McMurdo's storage tanks.



By this time, USNS Pvt. John R. Towle (T-AK 240) was inching toward McMurdo with a cargo of food and construction supplies for which a pier would be needed.

When she arrived, she found a pier was available through the efforts of the icebreakers and Antarctic Support Activities constructionmen who had sawed a smooth face on a pier carved from the ice. Towle's tons of cargo were unloaded without mishap.

Atka and Glacier battered and crushed the thick ice of the Ross Sea to enlarge McMurdo's harbor facilities and to cut a pier close to shore for USNS Pvt. Joseph F. Merrell (T-AKV 4) when she arrived.

Things didn't go well this time, however. A freak pressure change caused the ice to crack at right angles of the cut and Merrell had to be moored farther out in the harbor.

The icebreakers kept the channels open until the last cargo ship had deposited its supplies and returned to New Zealand. Then the icebreakers, too, steamed away leaving the sea undisturbed to seal the wintering-over party tightly into Deep Freeze '64.



FIGHTING McKEE

ROUGH, TOUGH, GREYHOUND OF WW II

ALL HANDS SPECIAL SUPPLEMENT

ANYONE AROUND *who remembers* McKee? *Not very many, we'll wager. There's no special reason why you should. If you've come into the Navy since the end of World War II, she's before your time. She is mentioned briefly, if at all, in the standard history books. She was just another DD cranked out by the hundreds by U.S. shipyards during the war.*

There was nothing much to distinguish her from swarms of other DDs. No glory, but plenty of hard work and danger was to be her destiny. Yet it was ships like USS McKee (DD 575) *which made it possible for the more glamorous carriers, battleships and cruisers to reach the headlines. In telling the story of* McKee *we are also telling the story of the many, many other destroyers who quietly did their job, then vanished—almost—from the pages of history.*

THE WAR WAS COMING to an end. Planes from the big carriers were methodically wiping out Japan's war potential. Big battleships were bombarding coastal targets. Then, on 30 Jul 1945, Destroyer Squadron 25 penetrated Surigao Wan to knock out an aluminum plant in a four-minute bombardment, protected by only a few night fighters.

Right there in the thick of it was USS *McKee*.

McKee had been one of the seven destroyers to make that raid. In addition, she had participated earlier in 11 amphibious operations, from New Guinea to Okinawa. She had operated with the same fast carrier task force for the last two years. She was already an oldtimer, carrying on as the fourth generation of a fighting Navy name.

(Lieutenant Hugh W. McKee, for whom the destroyer was named, was mortally wounded while leading the attack on Korean forts on Kango-Hoa Island, 11 Jun 1871, and died on board the steam frigate USS *Colorado*. Torpedo Boat No. 18 and DD 87 also bore his name. Torpedo Boat 18 was launched in 1898 and was stricken from the Navy List in 1912. DD 87, launched in 1918 was scrapped and sold in 1936.)

COMMISSIONED IN MARCH 1943, at Orange, Texas, *McKee* took no time to get into the fray. She was soon operating out of Pearl Harbor, steaming on patrol and plane guard stations, sailing at different times with USS *Essex* (CV 9), *Yorktown* (CV 10), *Cowpens* (CV 25), and *Independence* (CV 22).

Late in October 1943 she received orders to join Task Force 53 at Espiritu Santo. Upon arrival, she promptly covered a retiring convoy from the newly invaded Empress Augusta Bay, Bougainville.

McKee didn't do at all badly in her first encounter with the enemy, when she helped fight off the expected Japanese air raids which followed the invasion. Aided

by intermittent moonlight and flares, the enemy planes pressed attack after attack.

McKee knocked down her first plane shortly after the attack began, when her 20-mm. caught a plane 400 yards away.

Fifteen minutes later another attack came in. *McKee* came through unscratched.

Things were quiet then for a few hours, except for snoopers, when more unidentified planes alerted the formation. Five minutes later, *McKee's* second plane of the night fell a victim to her 20-mm. guns, after it had dropped a torpedo which passed under the ship without exploding.

Eight hours after the first alert, the weary crew finally secured from GQ. This was their introduction to the fighting war.

WITH ONLY TIME OUT for refueling, the destroyer joined Carrier Task Group 50.3, headed by *Essex*, *Independence* and *Bunker Hill* (CV 17) in a raid on Rabaul. The score was quite satisfactory — a heavy cruiser and destroyer heavily damaged, one enemy destroyer sunk, three other ships slightly damaged.

When enemy planes attempted to retaliate, no damage was done to the task group, but over 50 enemy planes were shot down by the carrier planes and the guns of the Task Force. *McKee* claimed one sure kill and one possible.

Two days later, *McKee* joined the huge amphibious task force involved in the seizure of Tarawa. Despite the heavy fighting on Tarawa itself, here her role was relatively quiet. Her job was to patrol off shore and screen the heavier units. But the youthful DD was already developing a wide background of combat experience.

KWAJALEIN WAS NEXT on the list. Beginning at 0810 on the morning of 2 Jan 1944, *McKee*, in company of USS *Stevens* (DD 479) and *New Orleans* (CA 32), pounded Enubuj (an islet in the Kwajalein group) in close fire support for the landings. The destroyers continued to fire until the landing craft began their approach to the beach, firing over 2000 rounds of 5-inch shells into the landing beaches.

Screening duty followed—two weeks of it—then a brief run in which *McKee*, in company with four LCI rocket launchers, worked over the islets between Kwajalein and Ebeye, then covered the landings on two islets north of Ebeye.

By this time, three months after her arrival in the area, the crew of *McKee* were old hands in invasion techniques. Considerably more dangerous and strenuous than the 9:00 to 5:00 routine they had been used to not so long ago. Now their life was a round of convoy duty, pre-invasion assignments and bombardments.

Unexpectedly strong resistance on Saipan and the battle of the Philippine Sea caused the initial schedule for the invasion of Guam to be canceled and, after spending several days at sea in the vicinity, *McKee's* group was ordered back to Eniwetok. Getting underway again on 17 July, the destroyer arrived on station on 21 July to begin close support fire.

The first assault wave hit the beach at 0826. An hour later heavy mortar and machine gun fire by the enemy in the vicinity of the Chonito cliffs began to hit around amtracs off *McKee's* left flank.

Closing to within 140 yards of the reef, *McKee* cov-



NIGHT ACTION — WW II DDs were on 24-hour duty.



FIGHTING DD is seen beyond the deck of *Enterprise*.



JAPANESE PLANE leaves trail, going down off Guam.



TWO PLANES in one action were splashed by McKee.

ered the point with 20- and 40-mm. fire, taking aboard seven wounded Marines. Locating the howitzer, she knocked it out of action.

DAYS FELL INTO A pattern of firing ashore and loading ammunition, then firing illumination and harassing fire at night. On 25 July 1944 the ship's gunners had a good chance to test their skill on several targets. They scored hits on two bivouac areas and a supply dump, a concrete and log pillbox and large caliber coast defense guns. Ten days later, she retired to Eniwetok and then to Espiritu Santo with the escort carriers used in that operation.

By October the Allied amphibious groups were on the move again, and with them was *McKee*. This time she headed towards Leyte, the first landing spot in the Philippines. Arriving on her fire support station she received valuable aid in the form of two loyal Filipinos from Samar. These two, paddling out to the ship in a canoe, pointed out two landing barges, a small tug, an ammunition dump and prepared beach defenses, all of which *McKee* promptly destroyed.

Convoy duty again but, this time, with a different twist. Ultimate destination was San Francisco and a six-week overhaul. Refresher training, then more convoy duty, westbound, back to the Pacific theater of operation.

The situation was much different now. The refurbished *McKee's* first assignment was a sortie from Ulithi in the screen of Fast Carrier Task Force 58, bound for strikes on Japan. Carrier aircraft attacked Tokyo on 16 Feb 1945, after approaching the coast under cover of foul weather.

Pressing a vigorous attack, the planes shot down 322 planes and destroyed 177 on the ground in addition to sinking an escort carrier, nine coastal vessels, a destroyer, two destroyer escorts and a cargo ship. Shore installations were badly damaged during the two-day raid.

After retiring to lend direct support to the invasion of Iwo Jima, the task force hit Tokyo again, inflicting heavy losses upon the enemy with little damage to our own forces. Rough weather beat the ship and caused minor damage, but *McKee* was involved in no direct action with the enemy, performing screening duties, delivering mail through the fleet and steaming on picket duty. The group then returned to Ulithi.

UNDERWAY ONCE AGAIN in March, *McKee* steamed with the carrier groups to Kyushu, where strikes were launched to reduce airborne resistance to the Okinawa landings, slated for 1 April.

The raids were successful, but this time the Japanese were more successful against the American fleet. *McKee* first saw action in this operation on 18 March when, during a pre-dawn attack, she took four different planes under fire—with unobserved results.

Later that day she rescued a pilot from *Hornet* (CV 12). Bogies persisted until late at night, but no further attacks materialized. Two were taken under fire with no results. Another *Hornet* pilot was picked up on the morning of the 19th, and on the same morning the carrier *Franklin* (CV 13) was badly damaged by fires started when she was hit by two bombs from an enemy plane.

The fleet, instead of their usual hit and run tactics, chose to stay off Okinawa for weeks, screening the landing forces there from interference and acting as bait to



TENSE CREW watches bogie on suicide run; 50 enemy planes were downed with little damage to task force.



SUICIDE MISS—Bogie plunged 50 feet off bow in water after near hit on McKee. Parts of plane fell on her deck.



McKEE rides calm waters. *Bennington* is in background.

entice the suicide-minded Japanese aviators away from the more vulnerable transports. Attacks were frequent and severe.

Sigsbee (DD 502), *Dashiell* (DD 659), *Hunt* (DD 674) and *McKee* were on radar picket duty on 13 April during a particularly bad attack. There were several bogies during the morning, but nothing serious until early afternoon when one plane suddenly broke out of the dogfight and attempted to make a suicide run on *McKee*.

Missing his first target, the kamikaze went on to crash into *Hunt*. Immediately several others broke through the combat air patrol and made suicide runs on ships of the group, with at least three attacking *McKee*.

One plane crashed, after diving across *McKee's* forecastle, 50 feet off the starboard bow. Another dropped a bomb and escaped badly damaged, only to fall victim to the air cover. Still another was splashed by the ship's 40-mm. fire as he attempted to cross ahead.

DURING THIS ACTION *Sigsbee* was hit by a suicide plane, and *Dashiell* suffered some damage from a near miss.



HEAVY SEAS send pounding waves over the main deck, but tough little destroyers of World War II could take it.

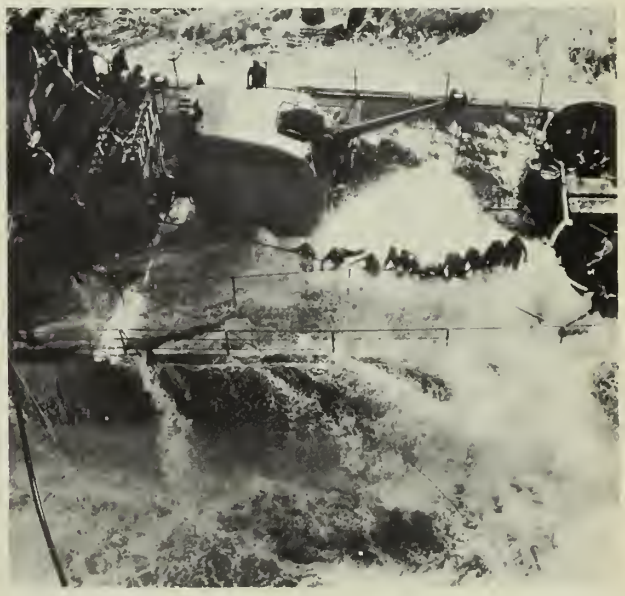
Battle Stars and Battle Scars

TO REVIVE a fine old cliche, *McKee's* active life was brief but eventful. During her three-year career she earned 11 battle stars on the Asiatic-Pacific Area Campaign Ribbon for participating in these operations:

1 Stor—Pacific Roids—1943:
Morcus Island raid: 31 Aug 1943
Tarawa Islond roid: 18 Sep 1943
Wake Island raid: 5-6 Oct 1943
1 Star—Treasury-Baugoinville Operotion:
Actian off Empress Augusta Bay: 8-9 Nov 1943
Robaul strike: 11 Nov 1943
1 Stor—Gilbert Islands Operotion: 20 Nov-8 Dec 1943
1 Stor—Morshall Islonds Operotian:
Occupotion of Kwajalein ond Majura Atolls: 31 Jon-4 Feb 1944
1 Stor—Morianos Operation:
Copture ond accupotion af Guom: 21 Jul-4 Aug 1944
1 Star—Hallandio Operation (Aitape, Humboldt Boy-Tanahmeroh Boy):
19-26 Apr 1944, 28 Apr 1944, 2 Moy 1944
1 Stor—Western New Guineo Operatian:
Moratoi londings: 15 Sep 1944
1 Star—Leyte Operatian:
Leyte londings: 13-24 Oct 1944
1 Stor—Iwa Jimo Operotion:
Assault and accupation of Iwo Jimo: 15 Feb-4 Mar 1945
Fifth ond Third Fleet raids against Honshu and the Nonsei Shato: 15-16 Feb 1945, 25 Feb 1945, 1 Mar 1945
1 Stor—Okinawo Gunta Operotion:
Fifth ond Third Fleet raids in support af the Okinowa Gunto Operotion: 17 Mar-11 Jun 1945
1 Stor—Third Fleet Operotions Agoinst Jopan: 10 Jul-15 Aug 1945

McKee was not damaged, although she had parts of one plane strewn over the main deck. Circling the wounded *Sigsbee*, *McKee* transferred two doctors and a pharmacist's mate from USS *Miami*, (CL 89) and then retired, screening *Sigsbee* until she could be turned over to the logistics group, whereupon she rejoined the screen of Task Group 581.

Later in April *McKee* had another close call when



CREW FOUND it difficult to see where deck ends and ocean begins in storm during refueling operations.

a single engine fighter, after pulling out of a suicide dive on *Hornet*, headed for *McKee*.

By stopping one shaft and going ahead emergency on the other, she was able to keep all her guns bearing on the target, which was shot down at 100 yards. Another *Hornet* pilot was received aboard during the day.

McKEE MANAGED to duck the big hurricane of December 1944 which had well-nigh wrecked the invasion plans of the Third Fleet, but in June 1945, she rounded out her seagoing experience by weathering a typhoon which reached 110 knots.

As the destroyer entered the eye of the tropical storm, she was lifted to the crest of a 50-foot wave, and then crashed bow-on into the sea, blanketing the ship under water and sending a solid eight-foot wave down the main deck.

All the crew except those needed to man the ship were sent to the crew's mess. Shifting from side to side to counteract the weight of the water, they enabled her to ride out the five-hour storm with only minor damage.

Results: the bow was found to be twisted slightly, plus one more wrinkle in the ship's skin on the port side.

IN JULY she joined Task Group 38.1 for the final sweeps along the Japanese coast. Later she rescued two aviators and on the same evening swept within seven miles of the mainland in search of enemy shipping. The group was not challenged and was unable to find so much as a picket vessel. The next day three aviators from USS *Belleau Wood* (CV 24) were picked up and added to the ship's already impressive list of rescues.

Destroyer Squadron 25—USS *John Rodgers* (DD 574), *Ringgold* (DD 500), *Dashiell, Schroeder* (DD 501), *McKee, Harrison* (DD 573) and *Murray* (DD 576)—was detached on the night of 30 Jul 1945 for the deepest penetration of Japanese home waters by surface units to date. Picking their way into Surigao Wan, the squadron wiped out the aluminum plants and railroad yards at Shimizu, pausing to sink a cargo vessel and a picket boat on the way out. Although friendly night fighters were hovering overhead, neither they nor the ship's anti-aircraft found any Japanese.

In a change of pace from the daily routine of combat, an "ice cream and cake" party was given by *Hancock* and enjoyed by the *McKee*men. It marked the 100th fuel transfer made by the carrier.

Back on the job, *McKee* came to the rescue of two pilots on the 9th. There were now constant rumors of pending Japanese surrender, but the ship remained on the alert for any die-hard suicide pilots. The peace rumors caused much excitement on the 13th, but continual bogies in the area caused even more. Approximately 15 were splashed by the combat air patrol during the day.

Finally, on 15 Aug 1945 the Japanese announced their willingness to surrender. The Third Fleet remained off Japan until the last of August when they proceeded into Tokyo Bay. *McKee*, however, was detached to screen *Wasp* (CV 18) to Eniwetok.

The war was over. From Eniwetok, the ships proceeded to Pearl Harbor, where they joined Task Group 11.6 for the East Coast. *McKee* was placed out of commission in reserve, on 25 Feb 1946. There she remains today, a gallant veteran living out her years in quiet readiness—in the event of another call to duty.

USS Hunt: Another Busy Destroyer in Which Heroic Action Was Order of the Day

OTHER SHIPS of *McKee's* group also led brisk lives. *Hunt*, for example, whose name keeps popping up in the *McKee* story, had a busy time. Consider this five-day period in February 1944 in which *Hunt* accompanied *Saratoga's* (CV 3) carrier task group that attacked Truk on the early morning of 16 February:

In the air strikes which continued through that day and until late the following afternoon, the enemy lost two light cruisers, four destroyers, three auxiliary cruisers, two submarine tenders, two submarine chasers, an armed trawler, a plane ferry and 24 auxiliary ships which included six tankers. A total of 211 enemy planes were destroyed and another 104 were damaged.

During this attack *Hunt* had a busy time. She fought off night attacks of enemy torpedo bombers which were unable to do any damage except that of a minor nature to USS *Intrepid* (CV 11).

Hunt then immediately joined USS *Enterprise* (CV 6) in her raid off Jaluit Atoll, in which two strikes attacked enemy installations on Enybor and Jabor islands. They destroyed hangars, the radio station, barracks, munitions and other stowage at Enybor, and attacked the boat yard, radio station and power plant on Jabor. *Hunt* returned to her home base at Majuro five days after she left it.

Sometime later, in June, *Hunt* was in the Battle of the Philippine Sea. There our forces struck a blow at Japanese naval air power from which it was never to recover.

It was on this occasion that VADM Marc A. Mitscher ordered searchlights turned on over his carriers so that returning pilots, dangerously short of fuel, could locate home base promptly. *Hunt* was able to rescue pilots and enlisted men from USS *Hornet* (CV 12), *Wasp* (CV 18) and *Cabot* (CVL 28).

WHEN FRANKLIN was hit by enemy aircraft bombs in March 1945, *Hunt* was alongside. *Franklin* was burning furiously when *Hunt* closed to assist in picking up survivors blown overboard by the force of the explosions. She rescued 429 men, then joined three other destroyers in patrol around the carrier, which was taken under tow by the cruiser USS *Pittsburgh* (CA 72). Four days later the group reached Ulithi, where *Hunt* put her survivors ashore, then turned to take up radar picket station off Okinawa.

Six days later, suicide aircraft attacked the destroyer USS *Dashiell*. The first plane dropped a bomb for a near miss, then made a pass for *Hunt*. Her tracer bullets riddled the plane, which passed at deck level, between *Hunt's* mainmast and forward stack. His port wing sheared off on the destroyer's mast and his starboard wing sliced into the stack, where it hung. The fuselage of the plane continued on, taking the number two whaleboat before crashing into the water about 25 yards from the ship. Meanwhile, *Hunt's* 40-mm. gunners were shooting down a second suicide plane before it reached them.

The story of the Destroyer Navy is filled with such accounts as these. They were a heroic group.

DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionolly meritorious service to the Government of the United Stotes in o duty of greot responsibility . . ."

Gold Star in lieu of Second Award

★ RICKOVER, HYMAN G., VADM, USN, for service in positions of great responsibility as Manager, Naval Reactors, Division of Reactor Development, U. S. Atomic Energy Commission, and as Assistant Chief of the Bureau of Ships for Nuclear Propulsion from January 1961 to January 1964. During this period, VADM Rickover exercised dynamic leadership and outstanding professional competence in assuring the continuing contributions of a major element in our national capability to deter aggression. He skillfully directed the efforts of his staff toward the cooperative development of the *Polaris* weapons system to its present advanced state, with 16 *Polaris* submarines now in active service and 25 more under construction. In addition, during this period, the nuclear-powered surface ships, *Enterprise*, *Long Beach*, and *Bainbridge*, joined the Fleet. These ships, each of a different combatant type, are establishing high standards for the new fleet of combatant surface ships to follow. Under VADM Rickover's leadership, the cost of U. S. naval nuclear propulsion plants has been lowered, reactor core life has been increased, and significant improvements in simplicity and dependability have been achieved. His contributions in the field of civilian reactors have been important factors in the continued development of these units.



LEGION OF MERIT

"For exceptionolly meritorious conduct in the performonce of outstonding service to the Government of the United Stotes . . ."

★ REYNOLDS, Robert M., RADM, USN, for service during the period October 1959 to November 1963 as Fleet Material Officer, Commander Naval Air Force, U. S. Pacific Fleet; and as Bureau of Naval Weapons Fleet Representative, Pacific. Exercising a high degree of technical skill and resourcefulness, RADM Reynolds has made invaluable contributions toward increasing the operational and readiness capability of the Navy—particularly the Naval Air Forces. Through his sound judgment and keen foresight in recognizing and classifying material and maintenance defects, and in providing corrective action, the Navy has realized a marked increase in reliability, availability and safety of many of its complex weapon systems. RADM Reynolds was directly responsible for incorporation of the Pilot Landing Aid Television System (PLAT) on Navy carriers. He also was directly responsible for the development of the Quality Assurance Manual. Recognizing the need of traceability of measuring accuracy of equipment, he directed, promoted, and established a program of metrology throughout the Pacific Fleet.

★ MARTIN, WILLIAM I., RADM, USN, for outstanding service as Chief of Naval Air Reserve Training from 31 Oct 1961 to 13 May 1963. Under his Command the skilled, spirited performance of the Naval Air Reserve personnel throughout the Berlin and Cuban crises contributed most significantly to the success of the naval mission in these critical periods. Additionally, his tireless efforts in reappraising the traditional concepts of patriotism, dedication, and personal responsibility infused both civilian and military audiences throughout the nation with a singular willingness to continue to serve in, or to join, all branches of the Armed Forces.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving octuol conflict with on enemy . . ."

★ SHERRILL, Jack A., Jr., AM3, USN, posthumously, for heroic conduct on the night of 15 Aug 1963 while serving on board USS *Saratoga* (CVA 60) in the Mediterranean Sea off the coast of Sardinia. As Aircraft Director, Sherrill, while performing his duties on the flight deck during night flight operations, observed that an aircraft had entered the glide slope and was rapidly approaching the ship for a landing. At this time the flight deck had not been cleared from a previous launch and respot. Sensing that a crash would ensue, he remained on his station in the center of the flight deck and, with only his 'director wands,' attempted to attract the attention of the pilot of the approaching aircraft in sufficient time to prevent a crash. Although his efforts were in vain, he willingly and bravely sacrificed his life in an effort to preserve the lives of his shipmates, and the safety of his ship.

★ BETLER, RAYMOND B., SF3, USNR, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As a member of *Remey's* rescue and assistance detail, which was sent to aid in fighting a fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Betler unhesitatingly entered the area of the fire and descended to the second deck to assist in removing an injured man to safety. Later, despite intense heat and heavy smoke, he assisted his teammate in removing a second man from below decks, following which he participated in a third rescue.

★ DAY, STERLING S., BM1, USN, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As a member of *Remey's* rescue and assistance detail, which was sent to aid in fighting a fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Day unhesitatingly descended about three decks into the after section of the burning ship and assisted in removing an injured man from this area. After this rescue he manned a fire hose at the center of the blaze, continuing his efforts throughout a period of approximately two hours, until relieved by Fire Department personnel.

★ HINTON, CURTIS A., ENS, USN, for heroic conduct on 3 Nov 1963 while serving as Boiler Officer on board USS *Springfield* (CLG 7). During a fire room casualty caused by the loss of feed booster pressure in which the number four main feed pump oversped dangerously, ENS Hinton immediately ordered the evacuation of the fire room and then personally secured the steam supply to the pump before leaving the space. Although burned and nearly overcome by the escaping steam when the turbine disintegrated, he returned to the steam-filled fire room to ensure that all his men had left. Through his outstanding leadership, courage, and prompt actions, ENS Hinton was directly responsible for avoiding serious personnel and material casualties.

TAFFRAIL TALK

ONE OF THE brighter bits of news in our mail bag recently was the announcement of the formation of the International Navy Bean Ball League.

We won't clutter your mind with the technicalities of the official bean ball rules but we can't help but regard with some awe the philosophical approach to the game by its asserted founder, Captain R. S. Crenshaw, Jr., USN, CO of *USS Springfield* (CLG 7). A realist if ever there was one.

As we visualize the scene from an INBBL rules book (one of the most abbreviated in the history of sports) bean ball is played, not with a ball, but a bag, and it gives full reign to the imagination of the participants. It bears a vague resemblance to volleyball.

The props, in addition to the bag (select your own size, form, texture and contents) include a net and a court.

The rule book footnotes, which are more extensive than the rules, have some interesting observations to offer. It is recommended that the court area should be relatively free of obstructions, both on the court and the immediate overhead. However, this (or any other) rule need not be enforced. Unexpected obstacles, according to the INBBL commissioner, add spice to the game. It is also noted that players have generally found an unmarked court acts as a stimulant to pungent and extended conversation.

Other suggestions are equally provocative. All other things being equal, it has been recommended that the smaller the court, the larger should be the team. This makes for comradeship and is highly beneficial in affording the ship's doctor and sick bay personnel unexpected training.

There are a few words of advice concerning the selection of the team. Every effort should be made to provide each team (there are of course two teams to a contest) with an equal ratio of young LTs and below, well-rounded LCDRs and above. Or non-rated men and chiefs, as the case may be. In any event, the junior members are of no great importance to anyone but themselves. Seniority plays a principal role in "winning bean."

There are no referees nor umpires. Conscience and a loud voice will settle most disputes should—heaven forfend—any arise. If there are none, you're not really playing the game.

All the ships in the Sixth Fleet are—whether or not they wish to be—charter members in the league. However, if they decline, it doesn't matter. There are no dues, no regular schedules, no membership certificates to frame and dust. Interleague trading is frowned upon.

As the rules makers conclude in an all-caps aphorism—Winning the game isn't important—it's everything.

We note that the rules book credits three authors: In addition to Captain Crenshaw, they are Captain J. N. Horrocks, Jr., USN, International Bean Ball League Commissioner; and First Lieutenant L. McLaughlin, USMC, Chairman, Rules Committee, thus sharing, or dividing, the responsibility three ways.

We're willing to bet a month's pay that *Springfield* is a happy, bean-ball winning ship. If you're interested in joining their league, drop them a line via FPO New York.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

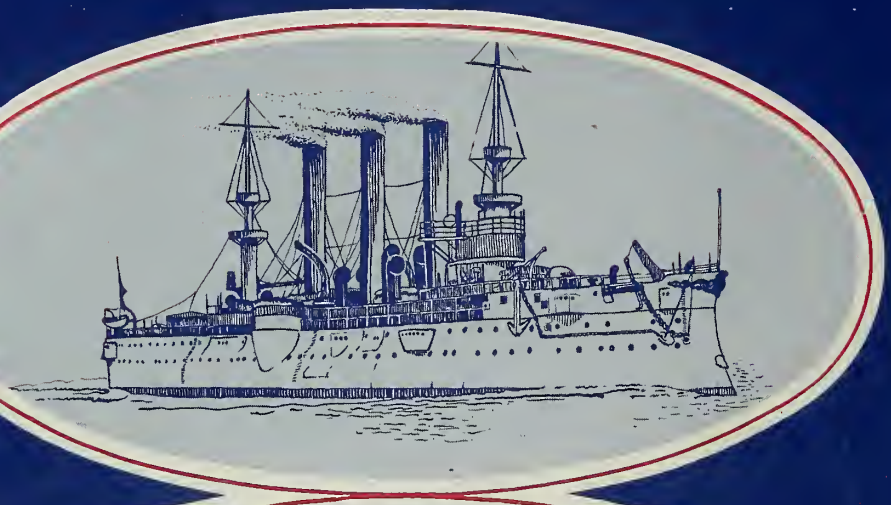
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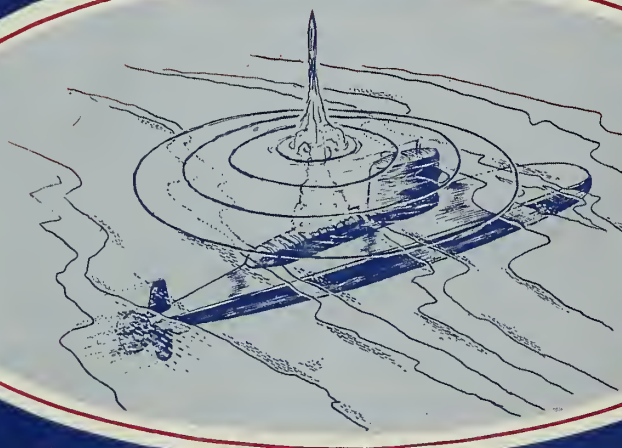
• **AT RIGHT:** RIDING HIGH—A Navy doctor rides high over the water as he is highlined to fleet oiler USS Hassayampa (AO 145) while underway during operations in Pacific waters.



the U.S. NAVY . . .

PAST





PRESENT

FUTURE



. . . EXCITING CHALLENGE

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

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JUNE 1964



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

JUNE 1964 | Nav-Pers-O | NUMBER 569

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The Deputy Chief of Naval Personnel

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• **FRONT COVER:** BOAT IN FLIGHT—Boats perform many different jobs in our modern Navy. Here, a ship's boat crew lowers a motor whaleboat over the side for a trip to an island while cruising in Pacific waters.

• **INSIDE FRONT:** SHADES OF THE PAST—In the days of sailing ships seamanship often depended on the Navyman knowing his way around the rigging and masts. Today it is just as important for a Navyman to know his ship and job. Here, a sailor works aloft aboard a present-day ship.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor. DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

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Jacks-of-All Jobs: Navy

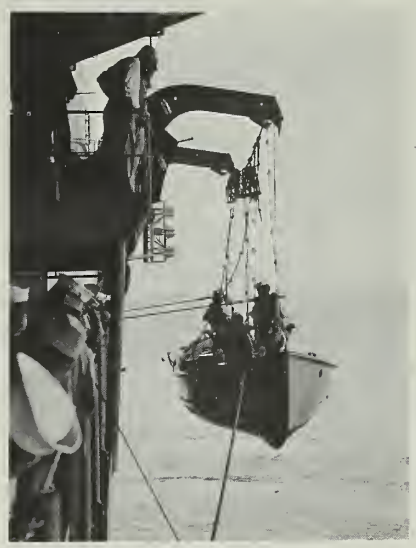
NO MATTER HOW LARGE and how modern our ships of the Fleet may become, boats will always be a necessity in the Navy.

A boat and a ship have certain characteristics in common. Like a ship-in-miniature, a boat floats, and it carries varying loads of men, weapons and other materials. However, although under certain emergency conditions boats have made extended journeys over the ocean, they cannot make regular independent voyages of any length on the high seas.

The most common definition states that a boat is usually a craft small enough to be hoisted and carried aboard a ship. (Submarines are sometimes called boats, but this practice is dying. Submarines are ships in the framework of the above definition, and that's how they are now referred to generally.)

The *BuShips Technical Manual* gives this official definition: "A Navy boat is an uncommissioned waterborne unit of the Fleet, not designated as a service craft, and capable of limited independent operation. It may be assigned to and carried on a ship as a ship's boat or to a shore station or Fleet operating unit."

Even in the nucleonic, electronic, supersonic Navy, boats play a significant role in the life of a sea-going man. They are used for transportation; they are essential to the plans of liberty parties; they have been the subject of numerous tales of gallantry and heroism; and at times they are real life savers.



SAILOR'S FRIEND — Boat crew aboard *USS Ranger* (CVA 61) holds lifeboat drill with whaleboat.

Boat seamanship is therefore an important aspect of naval life. Almost every Navy ship carries a variety of boats on board—the number and type dependent on the size and type of ship.

Most boats, regardless of size or mission, have a qualifed coxswain. In many respects his duties and responsibilities parallel those of the commanding officer of a ship. A boat coxswain is in command of his boat at all times, subject to the supervision of the senior line officer present, if any.

If a seaman is to meet the responsibilities of this job, he must become knowledgeable on a number of subjects relating to boats and their operation—he must know his boat seamanship.

Boats are divided into four classes:

- *Standard (shipborne) boats* — normally carried aboard ship for general use.
- *Special (non-shipborne) boats*— designed for special uses by the shore establishment and, to a lesser degree, by the fleets.
- *Small landing craft* — normally carried aboard ships for amphibious uses.
- *Miscellaneous boats* — including experimental boats, boats of commercial types, obsolescent types (used when others are in short supply), landing craft not classified as standard boats, special boats, or small landing craft.

Of the boats that are motor driven, most have diesel engines, though some gasoline engines are still in use. Wherries and punts are moved by manpower—oars and paddles.

Powerboats

Most powerboats are designed for a specific purpose, though some fill substitute roles in the Fleet. Every powerboat carries a label plate giving the boat's length, type, registry number, builder's name, date of manufacture and plan number.

Most important of all, the label plate states the maximum number of men to be carried. If cargo is carried, the coxswain multiplies this number by 165 pounds (the average weight of a man) to figure his maximum load.

Here are some of the more common types of powerboats:

Motor launches: Heavy duty, square-sterned boats, from 26 to 50 feet long, with 40- or 50-footers the ones most commonly seen. They are steered with a tiller and designed for the ship's heavy work, such as hauling stores, liberty parties and the like. Motor launches are gradually being replaced by the newer designed utility boats which are used for the same purposes.

LOOKING SHARP—Admiral's barge in traditional decor cuts through harbor.



Boats

Motor whaleboats: Double-ended boats with both bow and stern being bow-shaped. They curve gracefully from a low freeboard to a high bow and stern. They are very seaworthy when not overloaded; and are divided into forward, engine and after compartments. Although basically open boats, some have removable "hard top" or "soft top" canopies built over the forward compartment. If the boat has neither, the passengers stand a good chance of getting a ducking in heavy weather.

Motor whaleboats are used for lifeboats, light work and small liberty parties.

Motorboats: Fast, decked boats with closed compartments forward, amidships and aft, and an open cockpit amidships where the steersman stands at the wheel. They are used chiefly for carrying officer personnel. The newly designed Personnel boats are gradually replacing the motorboats now in service.

Barges: Known to anyone who has ever taken a Navy indoctrination exam, these are modified standard boats assigned to flag rank officers. They are often modified 26-foot, 28-foot, 33-foot or 40-foot personnel boats; 35-foot or 40-foot motorboats, or 36-foot LCP(L)s. The hulls of barges are always painted black. All other Navy boats and craft are painted haze grey.

Gigs: Standard boats are assigned for the personal use of commanding officers; chiefs of staff; and squadron, patrol and division commanders below flag rank. The gig on a small ship may be a motor whaleboat, or sometimes airplane personnel boats are used.

The main difference between barges and gigs and standard boats of the same type is in the hull fittings, and the interior furnishings and the exterior painting. Barges and gigs carry chrome-plated bow insignia and stern lettering, and when an officer embarks in his personal boat his flag is flown from the bow.

Airplane personnel and **airplane rescue craft:** Light, fast, round-bowed boats whose purposes are indicated in their names. They may usually be distinguished by the large, soft pudding or fender which runs around their gunwales. The purpose of this

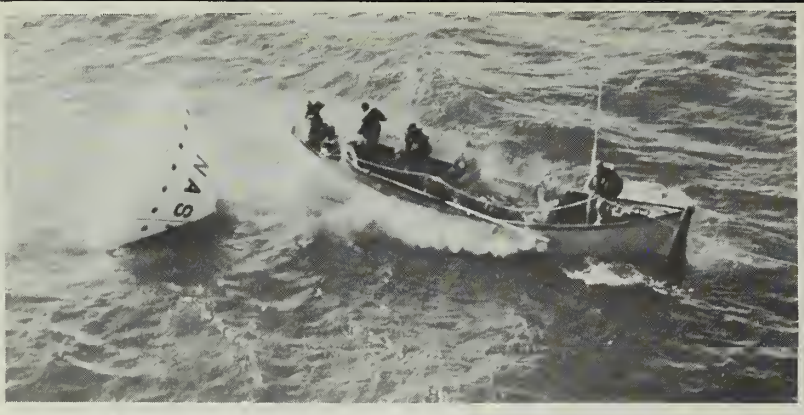


SPEEDSTER—Navy frogmen prepare to hit the water from fast-moving LCP(L).



ON AIR — Inflatable boats are used as liferafts and for recon missions. *Below:* LCMs deliver troops and equipment during amphibious exercises.





GOOD CATCH—Boat crew maneuvers to attach lines to recover capsule.

Boats in Use in the Navy Today

Boat	Length (in feet)	Use
Plastic dinghy	9	w/a sail used as tender w/sail used for recreatian
Punt	10, 12, 14	General purpase warkbaat
Wherry (waad)	12, 14, 16	Tender for small vessels
Wherry (plastic)	12, 16	Tender far small vessels
Line-handling baat	17, 20	General purpase use and handling lines far seaplanes
Rescue boat	19, 20, 40, 45, 63	Waterbarne rescue work
Utility baat	22, 26, 33, 40, 50	Transpart personnel ar cargo
Plane persannel boat	24	Transport persannel between share and seaplanes
Mator launch	26, 30, 36, 40, 50	Transport persannel ar carga
Matar whaleboat	26	Transport personnel and use as lifeboat
Mator warkboat	27, 30	Use an salvage ships and general purpose
Whalebaat	28	Training
Persannel baat	26, 28, 33, 40	Transpart persannel
Plane rearming boat	33, 35	Rearm seaplanes
Matorboat	35, 40	Transpart officer persannel
Minesweeping launch	36	Assault minesweeping of moared, magnetic or acoustic mines
Reconnaissance boat	36	Reconnaissance
Picket boat	36, 45	Harbar picket duty
Buoy boat	38	Maintenance of harbor buoys
Plane service boat	40	Transpart personnel, carga and plane servicing unit
Plane persannel and rescue baat	40	Seaplane rescue, firefighting, and persannel carrier
Aircraft refueling baat	42	Refueling seaplanes
Mine diving tender	50	Tend divers recovering or dispasing of mines
Noise measuring baat	50, 63, 73	Measure submarine noise
Underwater ordnance research boat	50	Underwater testing of ardnance equipment
Sounding boat	52	Obtain soundings far Navy Hydrographic Office
Bomb target baat	54	Aircraft target towing
Torpedo retriever	63, 72, 100	Retrieve tarpedoes
Distribution bax boat	64	Set and recover mine distribution boxes
LCPL	36	Landing craft cantrol vehicle
LCVP (waad)	36	Land and retrieve personnel and equipment during amphibious operations
LCPR	36	same
LCM 3	50	same
LCM 6	56	Land general vehicular cargo and personnel
LCM 8	73	Land a heavy tank ar ane of the larger vehicles

Inflatable Boots

7- and 15-Persan CO2 inflatable lifeboat	Lifeboat for abandoning ship
10-persan inflatable mat boat	General purpose for transpart submarine

pudding is to protect the fragile bodies of airplanes from damage by the boats.

Torpedo retrievers, frequently called **ronge boots:** Fast boats assigned to torpedo stations, whose purpose is to retrieve torpedoes fired on trial runs. They are strongly built and have powerful engines for hauling the heavy "fish."

Picket boats: Large, fast cabined boats—usually armed—whose general duty is to patrol the waters in a particular district.

Pulling Boats

Four types of boats still in occasional use in the Navy today are referred to as pulling boats. They are:

Dinghies: Small boats of about nine feet over-all length that are carried aboard larger craft such as aircraft rescue boats, landing craft and ships to provide transportation for the boat crew. These boats are propelled by a pair of oars.

Wherries: Longer versions of dinghies, normally about 12 to 16 feet long, propelled by one or two pairs of oars. They perform the same service as dinghies.

Punts: Square-ended, flat-bottomed boats, used for painting and general cleaning around the ship's waterline. They are fitted with row locks but are usually propelled by sculling.

Wholeboats: Light, double - ended open boats with high bows and sterns, used for training and recreation.

Amphibious Craft

Strictly speaking, the word amphibious, whether applied to a boat or an animal, means to be equally at home on land or in the water. The word is not used in that sense here, but is intended to apply to boats used by the amphibious forces in landing goods or personnel.

The essential difference between amphibious landing craft and other ship's boats is in the broad, flat design of their bow. In modern warfare it is often necessary to land large numbers of troops and their supplies on the beaches in a hurry, without benefit of piers or landings. A sharp-bowed boat has a tendency to ram her bow into the beach, careen, and spill her contents. The sharp bow also makes it difficult to retract, or haul off the beach.

Also, when a breaking sea gets under the stern of a regular ship's boat running through surf, the sharp bow goes under, and the stern tends to get ahead of the bow. This is

called *broaching to*. Amphibious craft with flat, square bows will not broach nearly as easily.

Landing craft are usually referred to by an abbreviation of their name. The various types in use include:

Landing craft, personnel (large), LCP (L): One of the first amphibious craft developed, used for landing personnel. It is steered from forward and is partially decked over. The newer versions are primarily used as landing craft control boats.

Landing craft, personnel (ramped), LCP(R): Incorporates the ramp idea for swift discharge of personnel and equipment on the beach. The bow is formed by a hinged gate, called a ramp, which can be dropped rapidly on the beach to form a bridge ashore. The ramp is hoisted against a watertight gasket by means of wires leading to a winch, and locked with a clamp.

Landing craft, vehicle, personnel, LCVP: This boat incorporates all the essential features of the LCP(R) and is the boat most frequently used today in landing personnel or moderate sized equipment. It is a single-screw boat, 36 feet long, weighs eight and one-half tons, and is manned by a coxswain, engineer and two seamen. It will transport 36 combat equipped men (225 pounds) or 8100 pounds of equipment at between eight and nine knots, and will travel light at 12 knots.

The LCVP is steered from a horizontal wheel inside the boat on the port side aft, and the ramp winch is operated by means of a hand crank. An after extension of the keel, called a skeg, protects the screw and rudder from contact with the beach. In combat this boat carries two .30-caliber machine guns on the raised flat aft. Besides its regular duty, the LCVP is frequently used in fleet boat pools for landing liberty parties.

Landing craft, mechanized, LCM: This boat is familiarly known as a tank lighter, or M boat, and is larger and stronger than the LCVP.

The LCM is 56 feet long, weighs about 25 tons, and can transport 120 combat equipped men (225 pounds) or 34 tons of cargo. It easily carries a 30-ton tank to the beach. It has twin screws, twin rudders and normally operates at about nine and one-half knots. Its ramp is operated by a power winch and is extra rugged to support the weight of tanks and heavy trucks.

The LCM is steered from an armored pilothouse aft, by means of an upright wheel. Its engines are in a closed compartment below, and the boat is manned by a crew of five.

The Navy has recently added the LCM 8, which is 73 feet long, weighs 67 tons and can transport 60 tons of cargo. The LCM 8 is the largest of the amphibious craft which will come within the definition of a small craft which can be hoisted aboard a large vessel.



A FAVORITE—Navymen board liberty boat headed for a visit to a foreign port.

BOAT SEAMANSHIP encompasses much more than a knowledge of the kinds of boats in operation in the Navy. Boat crews are responsible for the upkeep of their craft and must receive training in a number of other areas. Some of the techniques to be mastered require much practice and experience before a boat crewman can be accomplished in his work. The more important of these include:

- Hoisting, lowering and securing methods
- Operating boats properly under all conditions, including a knowledge of "Rules of the Road" (traffic rules, rules for overtaking, fog rules, etc.)
- Knowledge of buoyage systems
- Boat etiquette
- Towing operations
- Cargo handling
- Beaching and retracting techniques

The coxswain is responsible for the safety of the boat and the people on board. Many essential jobs could not be performed in the Fleet without boats and qualified seamen to operate them. The Navy simply could not be a navy.

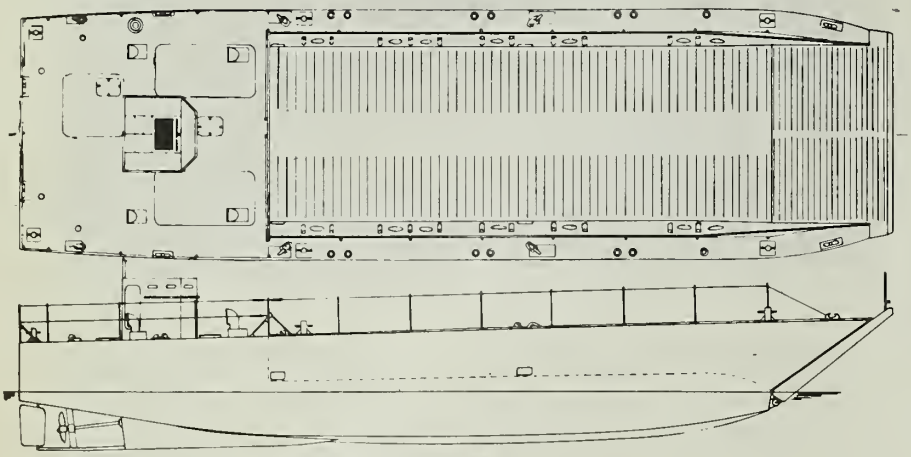
—Bill Howard, JO1, USN

ON THE JOB—Ship's motor launch acts as supply taxi for aircraft carrier.

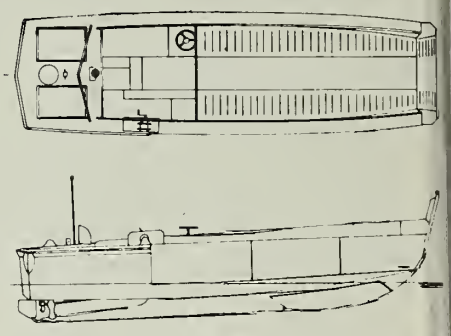


Landing Craft

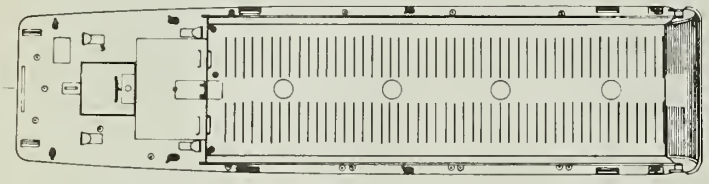
Landing craft of the Navy were developed mainly for the amphibious forces. They are designed to run through surf to a beach, lower a ramp, unload men and cargo, back off through the breakers, and return to the ship. The LCVP is used to land troops and light vehicles. The LCPL is primarily used as a landing craft control boat, its secondary purpose being for personnel transportation. LCMs, the most powerful of small landing craft, are capable of landing tanks or similar vehicles on beaches. The LCM(8) is the largest of these boats and will carry a heavy tank or 60 tons of cargo.

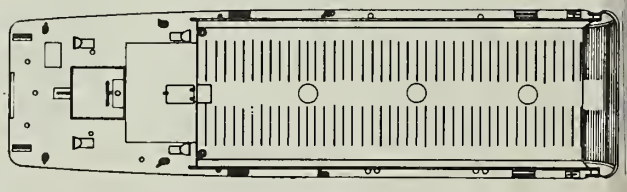


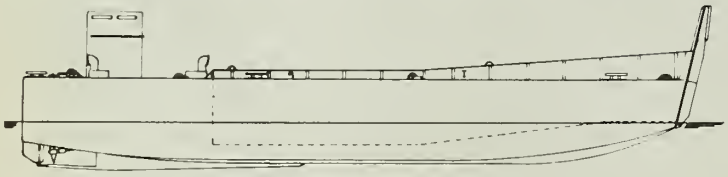
MECHANIZED—LCM(8)



LCVP



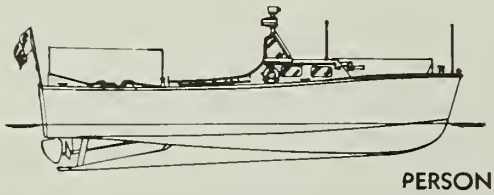


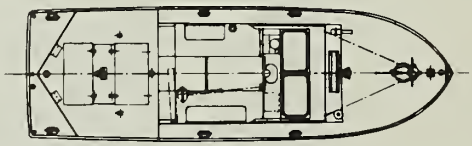


MECHANIZED—LCM(6)



MECHANIZED—LCM(3)





PERSONNEL, LARGE—LCPL





Boatmanship Has a Language All Its Own

The following are some of the terms which apply to boats in the Navy:

Beams: Transverse supports running from side to side to support the deck.

Bilge: The curved part of the hull where the sides and bottom meet.

Boatfalls: The lines used in hoisting or lowering a boat.

Boathook: A pole with a hook on it to aid in landing or hauling a boat alongside a ship or dock.

Boatplug: A threaded plug fitted into the bottom planking of a boat.

Bottom boards: Fore - and - aft planks forming the walking flat of the boat, sometimes called *floorboards* or *footings.*

Cabin: Covered compartment for passengers.

Chafing rail: A longitudinal timber projecting beyond the outside line of the hull planking to protect the hull.

Chock: A metal fitting through which hawsers and lines are passed.

Cleat: An anvil-shaped deck fitting for securing lines.

Deadwood: Triangular pieces of wood forming the connection between keel and stem, and between keel and sternpost.

Fenders: Portable bumpers of rubber or rope hung over the side to protect the hull.

Floors: Tranverse timbers that reinforce the frames athwartship, above the keel.

Footings: Bottom boards or walking flats attached to the inside of frames on boats not fitted with deep floors.

Frames: The ribs of a boat.

Garboard (garboard strake): The lowest strake of outside planking next to the keel.

Gripes: Fittings used to secure a boat at its davits or in its cradle.

Grapnel: A small, multiple armed anchor used to recover objects in the water.

Gudgeons: Metal loops or rings secured to the sternpost to hold the rudder pintles.

Gunwale: (pronounced gun'el): The upper edge of the side of an open boat.

Hoisting pads: Metal fittings inside the boat, usually attached to the keel, to take the main hoisting slings or davit hoisting rods.

Keel: The principal longitudinal timber of a boat, forming its backbone.

Keelsons: The fore-and-aft structural timbers fitted above or outboard of the keel.

Keel stop: A small metal fitting on the keel, at the after end, acting as a stop in locating the boat in its cradle.

Knee: The shaped timber for connecting structural members installed at an angle to each other.

Lazarette: A storage compartment in a boat's stern.

Life ring: A buoyant object, usually doughnut-shaped, designed to be thrown into the water to keep a person afloat. Also called a *life saver* or *life buoy.*

Painter: A line in the bow of the boat, for towing or making fast.

'Paulin: Short for tarpaulin—used to protect boats and stores from the weather.

Pintles: Metal pivot pins secured to the rudder and fitting in the gudgeons on the sternpost to support the rudder.

Plank sheer: A plank forming the center edge of a boat's deck.

Rising: The fore-and-aft stringers inside a boat, secured to the frames on which the thwarts rest.

Rudder: The flat steel surface or board rigged vertically at the stern to steer the boat.

Rudder braces: Metal straps secured to the rudder so their forward ends form into eyes which fit the rudder and make a pivot upon which the rudder swings.

Rudder hanger: A strip of metal secured to the sternpost vertically to form the traveler upon which the rudder braces are secured.

Samson post: A securely fastened vertical timber on the forward deck of a boat, often equipped with crossarms, for use in towing or mooring; (Samson post has other meanings in general maritime use; only the Navy boat usage is considered here.)

Sheer: The line the gunwale or deck edge follows in profile—the longitudinal upward curve of the deck from aft forward.

Slings: Gear made of wire rope for handling boats at booms or cranes.

Stemband: A metal facing or cutwater fitted on the stempost to bear the brunt of the sea while the boat is underway.

Sternfast: A stern line used to secure a boat.

Sternpost: The principal aftermost vertical piece of timber in a boat.

Stern sheets: The after part of boat.

Strakes: Continuous lines of fore-and-aft planking. Each line of planking is known as a *strake.*

Stringers: Longitudinal strengthening timbers inside the hull.

Strongback: The spar between the davits against which a boat is griped in.

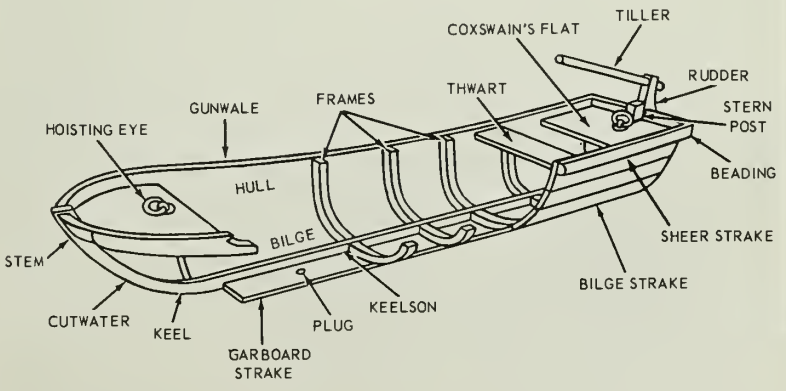
Thwarts: The cross seats or planks in a boat.

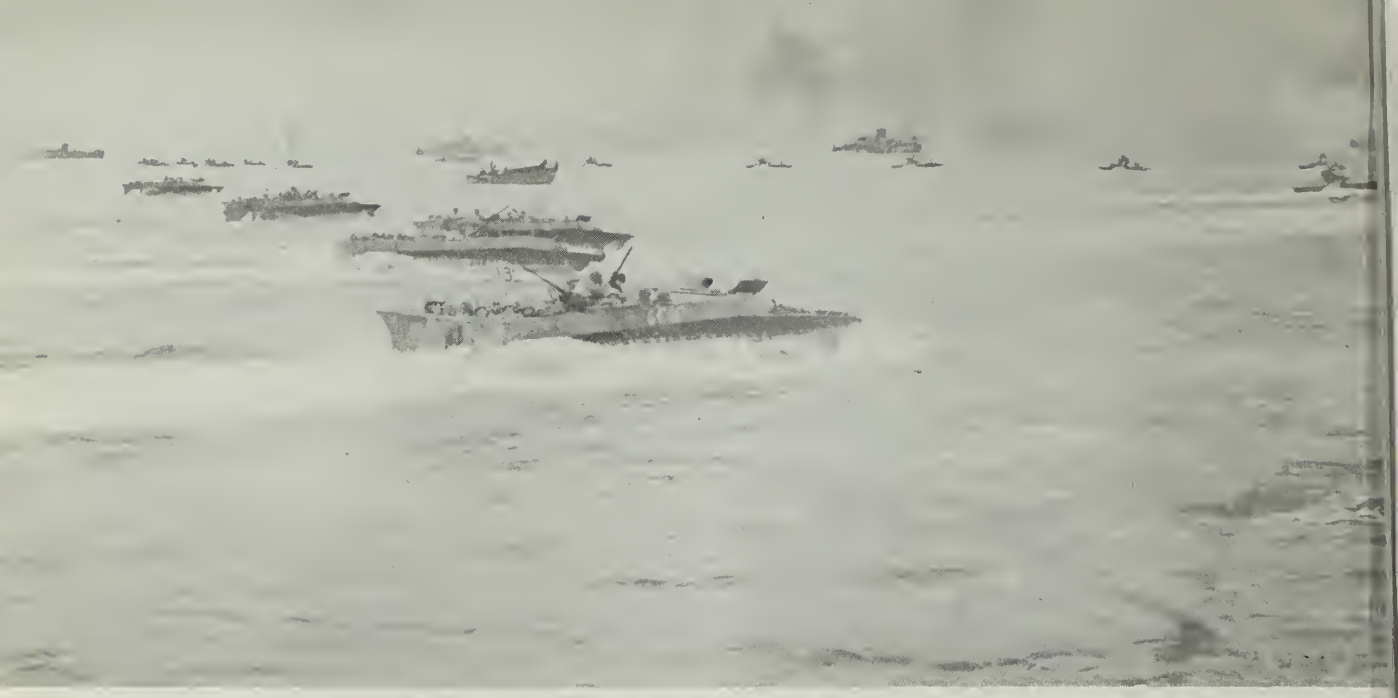
Tiller: A bar or lever by which the rudder is moved.

Towing bitts: Metal castings fastened to a boat's deck and used for mooring and towing lines.

Transom: The planking across the stern of a small boat.

Yoke: The athwartship piece fitting over the rudder head, by which the rudder may be moved.





TO THE BEACH—Landing craft head for the enemy shore under cover of smoke-screen during the battle for Peleliu.

AMPHIB ANNIVERSARY

WHEN THE NAVY'S amphibious forces counted the 22 candles on their birthday cake earlier this year, they began taking stock of their past and present accomplishments and their future possibilities. The findings were impressive.

The past of the Pacific amphibious forces during World War II is largely the history of the march toward Japan. It began with the invasion of Guadalcanal—the first in a long list of names which eventually included Vella Lavella, Eniwetok, Iwo Jima, Guam, Tinian, Okinawa and others.

In the Atlantic theater, amphibious landings began in Africa and culminated in the Normandy invasion.

Later, in Korea, the Inchon landing helped stem the tide of Communist invasion in the Republic of Korea.

More recent news has been replete with incidents in which the presence of amphibious forces offshore has exercised a strong effect upon the shape of history in the making.

The future effectiveness of the forces, according to amphibious experts, will depend largely on how well they apply the techniques of the past to develop faster and better ways of landing troops.

A NUMBER OF changes have already taken place in the amphibious forces. The concept of vertical envelopment represents a major change in the technique used in past wartime operations.

Vertical envelopment, of course, is the use of helicopters to airlift troops and equipment from seagoing vessels to positions behind enemy beach fortifications to cut off supplies and reinforcements from the rear.

Vertical envelopment, however, does not eliminate the necessity to transport heavy equipment and great numbers of troops ashore in landing craft.

On the contrary, the vertical envelopment concept created the necessity of developing new ships which would accommodate both helicopters and landing craft. The latest in ships of this type is the amphibious transport dock (LPD).

The Navy now has three—USS *Raleigh* (LPD 1), *Vancouver* (LPD 2) and *La Salle* (LPD 3) which was

A READY GROUP—Today's amphibious forces are fast-moving units that can strike wherever they might be needed.



commissioned in February.

The amphibious transport docks exploit the good points that have emerged from past amphibious experience, utilizing both helicopters and landing craft. This dual activity requires space and the LPDs have it. Their over-all length is more than 521 feet and they displace approximately 13,000 tons.

They can carry more than 900 Marines, together with their assault equipment and initial supplies, to an enemy beach by use of pre-loaded landing craft and helicopters.

The amphibious transport docks, together with the amphibious assault ships *Iwo Jima* (LPH 2), *Okinawa* (LPH 3), *Boxer* (LPH 4), *Princeton* (LPH 5), *Guadalcanal* (LPH 7) and *Valley Forge* (LPH 8) have enabled the Navy and Marine Corps to develop and improve the vertical envelopment technique.

TODAY, amphibious units and individual ships can be found around the world. Tactical air control squadrons (which direct air strikes and air traffic in assault areas) and naval operations support group units (underwater demolition teams and naval beach group units) make up the specialized arm of the amphibious force which helps sustain the amphibious assault.

Since World War II ended, the Navy's amphibious forces have averaged more than one amphibious landing a year in support of U. S. national policy or at the request of foreign governments. These landings have proven their effectiveness in controlling brushfire wars and restoring conditions to normal.

Assessing their future value, it would appear that amphibious forces will continue to grow in importance so long as the international scene remains in its present state.

AMPHIBS stage practice landing.





KOREA — LSTs of PhibPac offload at Inchon during Korean Conflict.



THE LATEST—*USS Vancouver* (LPD 2) has decks for copters and landing craft. *Above:* Troops board helicopters at sea for vertical envelopment exercise.



SURFERS—Coxswain and engineer of LCVP head their craft to the beach while serving with the Seventh Fleet.

Assault Boat Coxswain

LANDING CRAFT as we know them today made their debut in World War II, along with a new type of sailor known as the assault boat coxswain.

The first landing craft were blunt-nosed, flat-bottomed craft made of plywood. Troops scrambled out of them by climbing up and over the bow.

The first assault boat coxswains were men who had been qualified in the operation of standard Navy boats, then learned a new job. The change was radical, because while operating motor launches, motor whaleboats and officers' motorboats, the coxswains had practiced, above all, to keep from running aground. In their new job they had to learn to run their craft aground deliberately.

To appreciate the dangers of surf you have to experience the power of crashing breakers. The sea's power in this form has made a helpless hulk of many a craft. The assault boat coxswain, however, sees the surf as the final testing point of his professional aptitude.

STEADY DOES IT—Assault boat coxswain holds to beach as jeep is offloaded.



He learns to recognize quickly the three major types of breakers—*spilling*, *plunging* and *surging*—and their pitfalls. He learns that the proper approach to the beach means careful observation of the swell, so that he can ride the back of a breaker into the beach. A slight miscalculation in timing will cause the boat to surge ahead and ride the front of swell or breaker. On the downslope, or front, he finds himself in the hazardous situation known as "surfboarding." In such a spot he often loses control. His craft will first broach, then possibly capsize.

After bringing his craft through the surf he is faced with still further problems. He must maintain his boat firmly on the beach until troops and their gear are safe ashore. Then he must retract from the beach.

The engine is shifted into reverse. When a swell gives the craft flotation the engine is gunned. Once the craft floats free of the beach it is kept backing down at right angles to the surf. After he clears the breakers the coxswain waits for his craft to ride high on the crest of a swell, then he brings her around

and heads back to the mother ship. All of this might take place under heavy fire from shore batteries.

HERE'S THE STORY of one assault boat coxswain who took part in the Tarawa landing during World War II. It is taken from the log and action report of his craft's mother ship, USS *Sheridan* (APA 51).

Salvage crews from *Sheridan* were in the lagoon putting damaged landing craft back in order so they could be used in rescue work. They were well within range of enemy gunfire.

While the rescue work was going on, one LCVP coxswain used his craft as a gunboat. First it silenced an enemy machine gun with its own .30-caliber machine gun. Then the gun was trained on a wrecked landing craft to wipe out a Japanese sniper who had been using it as his nest.

After this workout, the LCVP joined the rescue party. Officers later spoke of the coxswain's "cool, impeccable seamanship." He had "kept perfect control of his boat against a strong current, holding her off the wounded men and yet close enough to lift them from the water, and not ground the boat."

The coxswain retracted his LCVP while bullets were whizzing around his head, and his crew and some of the walking wounded were stamping out incendiary bullets which threatened to touch off the drums of gasoline which he was carrying in the boat.

DURING the Korean conflict many assault boat coxswains received medals for heroic action. The citations repeatedly mentioned "the excellent judgment and high degree of technical skill" of the enlisted skippers.

On the shoulders of the assault boat coxswain rests a large part of the responsibility of landing our troops through the surf on a hostile shore.

The value of these men has been proved time and time again in our military history. Early predecessors of the assault boat coxswains did the same kind of work during the landing of forces in the Mexican War at Vera Cruz (1847); in the Civil War at Fort Fisher (1865); and in the Spanish-American War at Daiquiri (near Santiago, Cuba—1898).

During World War II our Pacific island hopping strategy owed no small part of its success to the ability of assault boat coxswains. They also played key roles in the landings in North Africa, Sicily, Italy, Southern France and Normandy—and more recently—at Inchon, Hungnam, Wonsan and other locations along the Korean coast.



ROUND & ROUND—Landing craft are maneuvered in circles before assault.

HOW DOES the assault boat coxswain learn his job? In addition to the training that is carried on by ships of the Atlantic and Pacific Amphibious forces, training for these "ABCs" is conducted at the Naval Amphibious Schools in Coronado, and Little Creek.

Students come from units of the Atlantic or Pacific amphibious forces or directly from boot camp. In their training the students learn the operation of LCMs and LCVPs. They learn about boat engines, clutches and bow ramps. They are instructed in magnetic compasses, voice radio procedure, first aid, salvage operations and towing in the surf.

Experienced instructors take them through all phases of an assault. This starts with the organization of the boat crew (basically the coxswain, engineman and bowman), and continues with debarkation from the mother ship, the shoreward movement, unloading operations, post-assault phases, and finally, boat handling alongside the mother ship. All this is crowded into one month.

The greatest number of hours is given to the actual operation of LCVPs and LSMs. Hours are spent on boat handling in an enclosed harbor and in the surf.

SHORE POINT—Coxswain must be able to beach and retract his craft.





SMOKER—Crew of LCVP lays smokescreen around LST during WW II action.

In most Navy training, when a student makes mistakes he sees the result in his grade marks. If he makes an outright blunder his ears may ring from instructor's censure.

NATURE, on the other hand, takes charge of punishing the careless and the blunderers during the coxswains' surf training. Coxswains find their craft being piled up on the beach, themselves and their crew winding up wet and shivering from repeated dousings in the pounding surf.

Other sailors are on hand during training maneuvers to handle these situations. They move in with tractor and "jeheemys" to render assistance. Wrecked or damaged craft are picked up by the jeheemy, a mobile lifting device, and carried overland to nearby repair facilities. Craft that are merely shaken up are lifted by the jeheemy, refloated and started on their way.

Training goes on. And soon the students are eligible to wear the special distinguishing mark that shows they are qualified assault boat coxswains.

These Pointers Will Help You Navigate to an Assault Boat Coxswain Billet

ANY ENLISTED MAN—unless he is a medical or dental rating—is eligible for qualification as an assault boat coxswain. First he must demonstrate proficiency in the specified practical factors, then he must pass a written examination. If qualified, he is assigned Navy Enlisted Classification (NEC) BM-0164 and is authorized to wear the assault boat coxswain designation on his right sleeve as long as he is qualified.

The tenure of qualification is one year from the date of qualification. He must requalify before the year expires to keep his eligibility in force. Requalification requirements are the same as those for original qualification.

Here is a list of practical factors to be satisfied by prospective assault boat coxswains, based on the *BuPers Manual*, Art. C-7409. Candidates should be able to:

- Perform coxswain's normal duties, supervise boat crew in hoisting and lowering operation, rig and secure all gear in a landing craft. Follow established procedure in handling all types of cargo including stowing in boat, hooking on for hoisting out, and unloading on beach.
- Handle a landing craft in protected waters, coming alongside, or casting off from vessel or pier. Observe all safety measures applicable to operation of the boat equipment, including ramp, sight ports and so forth.
- Use and identify boat signals, boat identification paddles, standard identification flags and insignia in connection with ship-to-shore movement.
- Maintain assigned station in all phases of ship-to-shore movement, employing knowledge of standard formations, distances and speeds used in assembly area, rendezvous area, and in assault wave. Steer by compass and observe Rules of the Road.
- Beach boat through moderate surf and retract, singly and in assault wave formation, using proper rudder and engine procedure.
- Rig, use and secure anti-broaching lines in the proper manner. Demonstrate how to rig a broached landing craft for salvage and proper use of engines to avoid fouling tow lines, in assisting salvage boat.
- Demonstrate ability to render first aid, rig stretcher slings, and use other methods of hoisting casualties.

If you're planning to take the written examination for assault boat coxswains, study this list of subjects:

- Nomenclature and use of hull fittings and equipment, cargo and personnel capacity, maneuvering and special hull characteristics, fuel capacity and fuel endurance of landing craft.
- Precautions and operating procedures related to starting the engine; normal and maximum safe motor temperatures; stopping and securing engine; and operation of bilge pumps and sand traps.
- Procedures and methods employed in embarkation of troops, loading and stowage of cargo, launching, hooking on, and fueling.
- Boat signals, standard identification flags and insignia, and boat identification paddles used in connection with ship-to-shore movement; control vessels' signals and signal procedures employed in controlling ship-to-shore movement. Debarkation communications and visual designations used for debarkation stations. Voice radio procedures.
- Standard formations, distances, and speeds employed in assembly, in the rendezvous area and assault waves; procedures followed by boat group commanders and control vessels in directing and controlling ship-to-shore movement.
- Special maneuvering rules and precautions observed prior to and during landing and retraction through surf.
- Beach markers and buoys used for marking channel and obstructions.
- Procedure for transferring personnel and equipment to LVTs direct or via transfer barges; procedure at transfer line.

Detailed information for the prospective assault boat coxswain is contained in the *Boatswain's Mate* 3 & 2 *Manual* (NavPers 10121-C), chapter eight.

TERMINOLOGY:

Ships, Vessels, Craft and Boats

A DISCUSSION OF BOATS AND CRAFT in the Navy can sometimes be a confusing one because – while there is a big difference–the terms don't always appear to be used when and as you might expect.

For example, a landing craft is listed officially as a boat. On the other hand, the PT boat of World War II fame was a craft.

You will find the official rules in Chapter 20 of *Navy Regs*. Basically three factors play a role in determining the designation: Its purpose or capabilities, size and crew.

Basically, a boat is usually lifted and carried aboard a ship (unless assigned to a shore activity). On the other hand a craft may be expected to get where it's going under its own power, or to operate more or less independently when it gets there.

A contributing factor is size. Craft are generally larger—sometimes considerably larger—than boats, enabling them to operate on their own.

The third factor is the crew, and whether it is regularly or permanently assigned.

Water-borne units of the Navy fall into certain general categories for classification purposes. As set forth in *Navy Regs*, they are either vessels, service craft or boats.

According to *Navy Regs*, **vessels** comprise generally the oceangoing *ships* and oceangoing *craft* of the Navy (and such other water-borne craft as may be assigned this classification).

Service craft generally comprise the "water-borne utilitarian craft which are not classified as vessels or boats."

Boats are in that category defined as "suitable for shipboard and similar use."

Navy Regs leaves it up to the Chief of Naval Operations to decide how each particular unit will be classified. The CNO, in turn, considers not only the unit's size, but also its capabilities and usage in making this final decision.

The *Bureau of Ships Technical Manual* goes into a little more detail. It lists the definition of boat as: An *uncommissioned* water-borne unit of the Fleet, not designated as a service craft, and capable of limited independent operation. It may be assigned to and carried on a ship as a ship's boat or it may be assigned to a shore station or Fleet operating unit.

The terms "in commission" and 'in service" refer to ships and craft in active status, but never refer to boats.

A vessel or craft which is *in commission* has a commanding officer, a permanent crew assigned and, as nearly as possible, everything else it needs to operate independently of other facilities. It is formally commissioned and flies a commissioning pennant.

A vessel or craft which is *in service* has an "officer in charge" or "petty officer in charge (or boat captain or skipper) may or may not have a permanent crew assigned, and is generally more dependent on continuing support from its parent command.

A boat has a boat coxswain. The boat coxswain has both responsibility and authority. As stated in *Boatswain's Mate 2 and 3* (NavPers 10121-C), subject to the orders of the officer of the deck and the senior line officer embarked, a coxswain has full charge of his boat and its crew.

On occasion a boat has a "boat officer." This may occur during heavy weather or on special assignments. While he has authority over the boat coxswain, he does not take over the coxswain's basic responsibilities or the normal duties expected of him, but he may relieve the boat coxswain if he sees fit. The senior line officer embarked (eligible for command at sea) of course assumes ultimate responsibility for the boat.

Sometimes a service craft contains in its title the term "boat." This may be an outgrowth of a seagoing tradition, but it has nothing to do with its official designation.

U. S. NAVY SERVICE CRAFT and DESIGNATIONS

Small Auxiliary Floating Drydock	AFDL	Garbage Lighter (Self-propelled)	YG
Medium Auxiliary Floating Drydock	AFDM	Garbage Lighter (Non-self-propelled)	YGN
Barracks Craft (Non-self-propelled)	APL	Dredge	YM
Auxiliary Repair Drydock	ARD	Gate Craft	YNG
Medium Auxiliory Repoir Drydock	ARDM	Fuel Oil Barge (Self-propelled)	YO
Minesweeping Boot	MSB	Gasoline Barge (Self-propelled)	YOG
Inshore Minesweeper	MSI	Gasaline Barge (Non-self-propelled)	YOGN
Target and Training Submorine	SST	Fuel Oil Barge (Non-self-propelled)	YON
Submersible Croft	X	Oil Starage Barge	YOS
Open Lighter	YC	Patral Craft	YP
Car Float	YCF	Floating Pile Driver	YPD
Aircraft Transportation Lighter	YCV	Floating Workshop	YR
Floating Crane	YD	Repair and Berthing Barge	YRB
Diving Tender	YDT	Repair, Berthing and Messing Barge	YRBM
Covered Lighter (Self-prapelled)	YF	Radiological Repair Barge	YRR
Ferryboat or Launch	YFB	Seaplane Wrecking Derrick	YSD
Covered Lighter (Non-self-propelled)	YFN	Sludge Removal Barge	YSR
Large Covered Lighter	YFNB	Large Harbor Tug	YTB
Drydock Companion Craft	YFND	Small Harbor Tug	YTL
Lighter (Special purpose)	YFNX	Medium Harbar Tug	YTM
Floating Power Barge	YFP	Drone Aircraft Catapult Contral Craft	YV
Refrigerated Covered Lighter (Non-self-propelled)	YFRN	Water Barge (Self-propelled)	YW
		Water Borge (Non-self-propelled)	YWN
Covered Lighter (Range Tender)	YFRT	Miscellaneous Auxiliary	YAG
Harbor Utility Craft	YFU		



NEW BROOD—Navy's new PTFs make a high-speed run during sea trials. *Below:* Famed PT boats of World War II patrol waters off Attu, in Aleutians.





HIDEOUT—PT crew relaxes in jungle.

A New Breed

PTF BOATS, THE NAVY'S FAST patrol craft, are playing a new role in the Fleet. Four of them are in service and are currently filling billets with the amphibious forces.

The PTF has been erroneously likened to PT boats of World War II fame. PT stands for motor torpedo boat. These small, fast, fighting craft created a whole new area of naval history for themselves during World War II. PTFs have as their mission the job of performing swift patrolling duties.

PTFs joined the Fleet last year. Fast patrol boats *PTF 1* and *PTF 2* are slightly larger, sleeker and faster than the colorful motor torpedo boats.

These craft were not exactly new when they began operational service. Each of them is a result of postwar experiments with their design. Their main defense is small size, high speed and change of pace, with the change depending on an ability for quick acceleration and quick maneuverability. These necessary characteristics demand that the entire structure, including the various machinery components and electrical equipment, be of the lightest





ON DUTY TODAY — PTF stands for fast patrol boat. Four of these craft are now serving with the Fleet.

of 'Mosquitoes' Joins the Fleet

weight possible, yet have adequate strength and endurance. Modern construction materials and processes have provided this requisite.

PTF 1 and *PTF 2* were first commissioned in December 1950 and March 1951, respectively. They were two of four boats built to experimental designs by different U.S. shipbuilders.

PTF 3 and PTF 4, known as "Nasty" class boats, were built in Norway and purchased by the U. S. Navy. *PTFs 1* and *2* measure 89 feet and 94 feet long, respectively, with beams of 24 feet and 25 feet. The Norwegian-built PTFs are 80 feet long with 24-foot beams.

All four boats are slick and uncluttered and tailored for maneuverability and 45-knot speeds. Each has firepower in 20- and 40-mm guns (surface and antiaircraft), and is manned by up to 15 enlisted men and three officers.

WHAT ABOUT THE PT BOATS? What happened to them? Are they still around?

During the war, in addition to functioning as motor torpedo boats, PTs in the Pacific were found to be very effective gunboats to stop Japanese inter-island traffic. They destroyed an astonishing number of small supply, personnel and ammunition craft. They provided courier service between American forces; escorted merchant ships in and out of Manila Bay; rescued ship survivors; performed reconnaissance missions; landed Allied agents; strafed enemy shore installations; ferried wounded personnel out of action; and destroyed certain war materials that would otherwise have fallen into enemy hands.

One PT boat was responsible for evacuating General Douglas MacArthur, his wife and son and 20 members of his staff from Corregidor past Japanese shore batteries and to safety. Another spirited Philippine President Manuel Quezon, his family and cabinet to safety.

It was not just by chance that the U. S. Navy was fortunate enough to have such a durable, capable craft as the PT at its disposal. After it was agreed that the need for such a craft existed much research, development and service experience were required to put it in action, because in the United States it had no other naval, commercial or pleasure craft counterpart.

MANY STORIES of the exploits and heroism of PT boat crews have come into the spotlight, including the epic adventures of the last skipper of *PT 109*.

At the close of the war, when the first plan for the post-war Fleet was drawn up, the motor torpedo boat squadrons had a definite place in the Fleet.

But economy finally dictated otherwise. Maintenance of a PT force in peacetime looked to be a costly project because of the relatively short life of the wooden hulls of the little boats (only ten years), requiring an almost continuous new construction program to maintain squadrons.

So the PTs just had to go. All but four—which were kept to be used for experimental purposes—and all AGPs were disposed of.

Now all PTs have vanished from the active Fleet.

PTFs, fast patrol craft, have shown up in moderate numbers to meet the operational need.

—Bill Howard, JO1, USN



FLYING ON FOILS -- Navy's only operational hydrofoil, *USS High Point* (PCH 1) cruises high on her foils.

Foils and Skimmers

MANY THINGS may change in this world, but the speed age is here to stay. Speed presents somewhat of a challenge to the Navy insofar as ship design is concerned. Conventional ships are limited in speed by a natural barrier—the wave-making resistance (water friction) encountered by a ship driven at high speed.

Until this resistance is overcome there cannot be any great advances in ship speed.

So the Navy, to produce ships capable of obtaining higher-than-normal speeds for certain missions—such as chasing submarines—is going "unconventional." The result is hydrofoil and hydroskimmer craft.

A hydrofoil craft has stilts and subsurface wings that lift the hull clear of the water. The hydroskimmer rides on a cushion of air above the water.

In addition to having a speed advantage, the hydrofoil craft can operate in waves or swells which would slow down a conventional ship of comparable displacement. Furthermore, the hydrofoil craft may, if desirable, operate for extended periods on the surface, just like one of the conventional Navy's ships.

One hydrofoil craft is in commission in the Navy today. It is the patrol craft *High Point* (PCH 1), which was built at Seattle, Wash. Information gleaned during 10 years of study by Navy and industry was applied toward *High Point's* design. The craft is being used to test the practicality of a hydrofoil coastal patrol craft.

High Point is 117 feet long, weighs 110 tons and, when flying on submerged foils, reaches speeds of more than 40 knots. Two 3000-hp gas turbine engines power its foil-borne operations. When not using the foils, it may use either the gas turbines or an auxiliary 600-hp diesel engine. Foil-borne, it has a range of 700 miles but, in conventional cruising, it may travel 2000 miles.

The craft carries four Mark 44 torpedoes, with which it can attack high-speed submarines.

UNDER CONSTRUCTION and scheduled for launching in the spring of 1965 is a 300-ton hydrofoil research ship designated AG(EH) 1. This ship will be capable of speeds of 40 or 50 knots, and later the foils may be redesigned to enable it to make speeds of 80 to 90 knots. The AG(EH) will demonstrate the open ocean capability of large hydrofoil craft at both moderate and high speeds, and it will, along with the PCH, provide further information about the military applications of the hydrofoil concept.

This concept will be better understood after additional research and development in the following areas:

- The phenomena of supercavitation (which could permit hydrofoil speeds of 80 to 90 knots). A 15-ton supercavitating craft is being used to test this theory.
- Better design techniques for hydrofoils and more suitable materials.
- The application of the hydrofoil in a military role.

The only other hydrofoil activity of note in the Navy currently is the construction of three hydrofoil amphibians—called LVHX—for the Marine Corps. These craft are 38 feet long, 10 and one-half feet wide, and are designed primarily to carry cargo from LSTs, LSDs and LPDs during amphibious landing operations.

They are designed to attain speeds

of 35 knots flying in the water and 40 mph driving on land, while carrying a five-ton load.

IN ADDITION to the hydrofoil program, the air cushion vehicle or Ground Effect Machine concept is being exploited. These craft are called hydroskimmers because, as we said, they actually skim or float over the water on a cushion of air. The hydroskimmer touches water only when at rest. In this way it avoids the friction of the water.

This type of craft is capable of high speed (about 100 knots). It can also carry a large load when compared to helicopters and, with its ability to operate just above the surface (about two feet), its area of operation is great.

As with hydrofoils, several test craft (varying in weight from one to two tons) have been built and tested, with the objective of testing different types of lift systems.

The only Navy hydroskimmer in operation today is the SKMR-1, which was completed in April 1963. It is still undergoing manufacturer's tests on Lake Erie.

The SKMR-1 is 65 feet long, has a beam of 28 feet and weighs about 25 tons. It has four 1080-hp gas turbines which propel it to speeds of around 70 knots.

The Navy has not decided exactly how hydroskimmer craft might best be utilized, but hopes to have a better idea as a result of tests being carried out with the SKMR-1. The tests are yielding data on general performance, speed, power and stability of the craft and possible military applications. The primary areas considered most likely to benefit from hydroskimmers are antisubmarine warfare, mine countermeasures, landing operations and patrol operations.



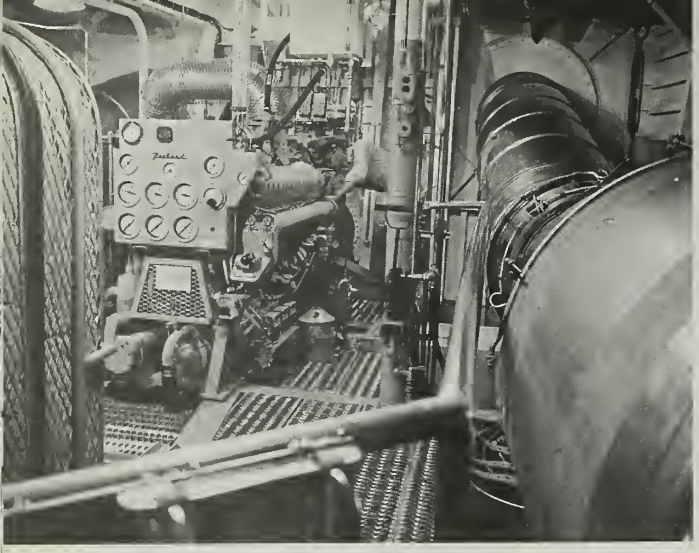
THINGS TO COME—An experimental hydroskimmer built for BuShips cruises two feet over water. *Below: Halobates* helped in development of hydrofoils.

The Navy is sure to learn a great deal in building these craft. They carry us to the brink of the state of several arts—including the arts of foil design and arrangement, gear train and bearing design, construction of extremely lightweight and strong structures, new types of propulsion, and many others. Even if the basic concepts prove to have only very limited application, the lessons learned in these areas will be worth the effort.



BOAT FANS—SKMR-1 hydroskimmer sails on a cushion of air at speed of more than 40 knots during test runs.

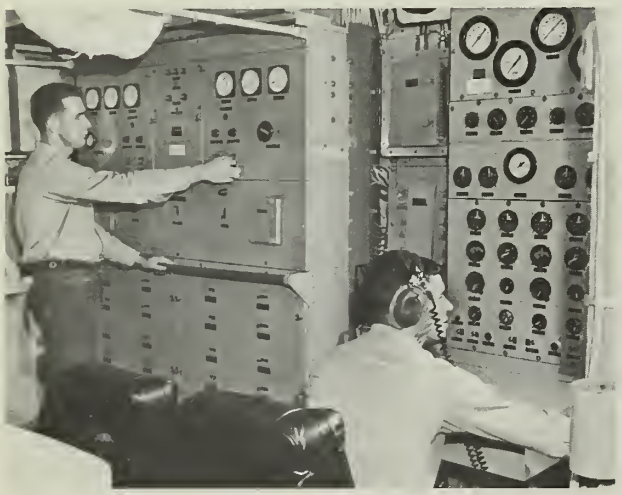




ENGINEROOM of *High Point* has plenty of power. *Below:* Torpedo tubes are main armament of PCH-1.



ON THE GO—Crew mans control panel to engine room.





WHEELHOUSE of hydrofoil resembles plane's cockpit.

Profile of High Point

This unique subchaser has two modes of travel . . . that of a conventional ship, or flying on her foils with hull clear of water. In this position she has obtained speeds of more than 45 knots.

High Point differs from the more common type of hydrofoil ship in her wholly submerged foil system, with control surfaces on the foils acting like aircraft ailerons to control the course through the water. The foils, controlled by an electronic height-sensing system, will maintain level "flight."

The pilothouse, in which two men sit strapped in bucket seats, looks like a cross between an aircraft cockpit and a ship's steering station. *High Point's* crewmembers used mixed terms, referring to the helmsman, but also such phrases as taking off, flying and landing.

The engine room is packed with high-performance machinery. Two 3100-horsepower gas turbines are used while the craft is foilborne.

At the aft end of the engineroom stands a 600-horsepower diesel which is used while cruising with the ship's hull in the water. In addition there is another diesel engine to provide electric and hydraulic power.

The fleet-"footed" hunter is armed with four torpedo tubes and a 50-caliber machinegun mounted just forward of the pilothouse.

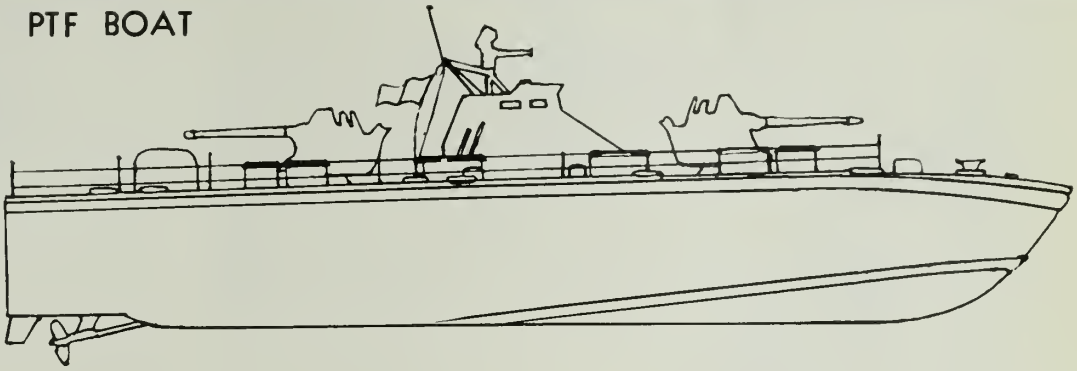
AIR BORNE — *High Point* flies high when using foils.



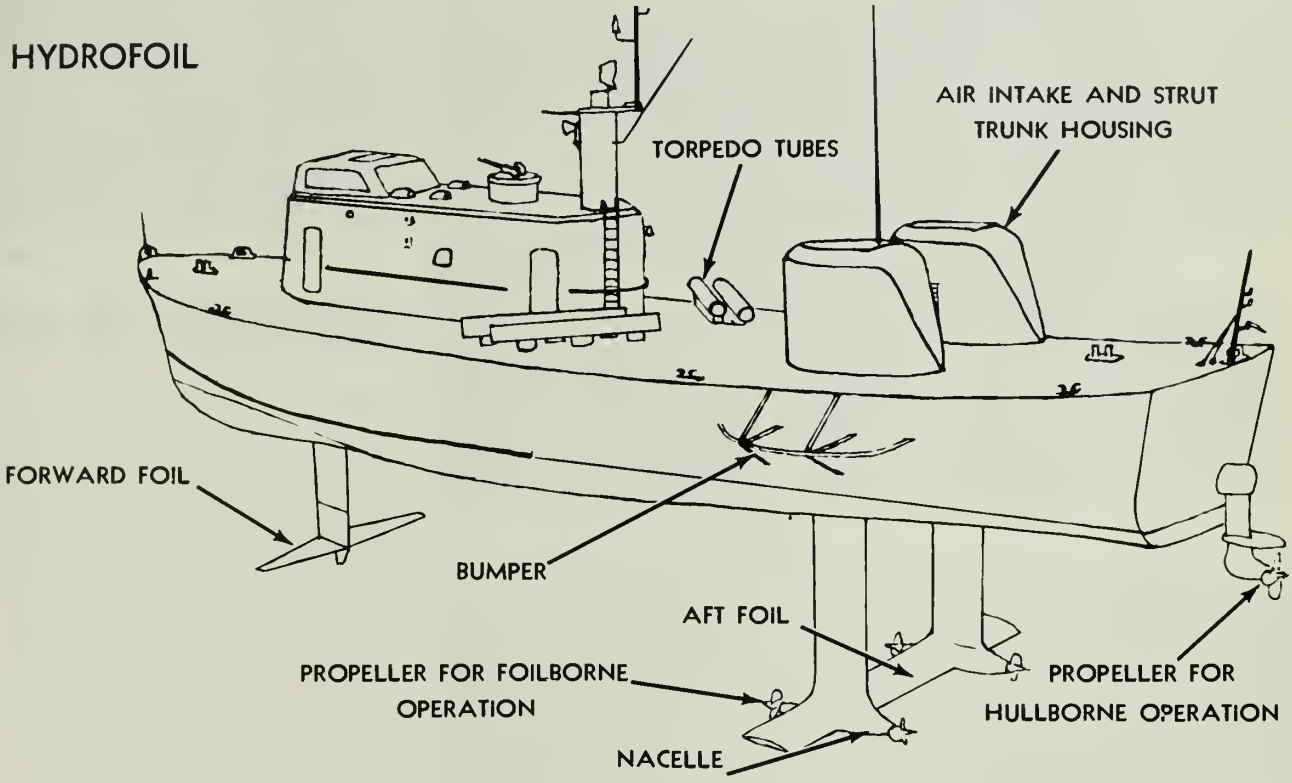
Patrol Craft

Fast patrol boats PTF 1 through PTF 4—slightly larger, sleeker and faster than the colorful motor torpedo boats of World War II—have again been introduced into the Navy's fighting forces.

PTF BOAT



HYDROFOIL



The Navy's newest antisubmarine warfare vessel, High Point, is the first operational type hydrofoil to be built for the Navy. Designed to exceed 40 knots, the new vessel has two modes of travel—that of a conventional ship, on the hull; and flying on her foils with the hull clear of the water. Over-all length of the vessel is 115 feet, her beam is 31 feet, and her full load displacement is 110 tons.







PIG OVERBOARD—Minemen lower float over side during sweeping exercise.





LITTLE MSBs do a big mine job.

MSBs Stay

MSBs ARE MINESWEEPING BOATS. They were specifically designed for minesweeping duties but are not designated as minesweeping vessels nor classified as combatant ships. They're designated as service craft, and assigned to the Atlantic and Pacific Fleet Mine Forces.

The MSBs are only 57 feet long. When fully loaded they displace about 44 tons. They are made of laminated wood and equipped with special type gear. The anchors are of brass, and other equipment which must be made of metal is usually aluminum or magnesium.

Even the engines and the tools to service them are of non-magnetic material. Each boat has two six-cylinder diesel engines which can produce 300 horsepower each. Driven by twin screws, the mighty mites are capable of cruising at a top speed of 12 knots.

The MSBs also have four gas turbine engines which drive the generators, which in turn produce the high-voltage electricity needed for sweeping magnetic and acoustic mines. Each generator is capable of producing an average of 200kw or



WOOD WORKERS—Minesweeping boats are made of wood, and all gear aboard is made of non-magnetic material.

Up Front and Lead the Way

a maximum of 1500 amperes at 2000 RPM.

Small as they are, the MSBs carry the same type minesweeping gear as their bigger sisters, the MSCs and MSOs, and are capable of sweeping contact or influence mines. The only difference in the gear is the generators, which are smaller on the 57-foot MSBs than on the larger coastal and harbor sweepers.

THE MSBs USUALLY OPERATE on a day-to-day basis. They get underway shortly after dawn and, as a rule, return to the minecraft base before dark. They operate with other MSBs and quite often with MSCs and MSOs. They usually operate for three weeks and then have a breathing period to catch up on paper work and other administrative matters. (MSBs maintain approximately 28 logs and reports, just about the same number as on the largest combat ship afloat).

The MSBs participate in type training, special competitive exercises and "ISE"—Independent Ship Exercises. The competitive exercises are usually conducted between the sections in each division and are based on the requirements set forth in the various training manuals. In these exercises, the MSBs conduct all types of minesweeping, collision, abandon ship, man overboard, scuttle ship, towing and steering ship drills.

The MSBs undergo rigid administrative and material inspections—just as the big ships do — every six

QUIET PLEASE—A minesweeping boat goes on the hunt with acoustic sweep.





CLEANING UP — MSBs prepare for an inshore practice assault sweep. *Below:* Lookout keeps sharp watch.



months. In addition, squadron and division commanders hold personnel inspection aboard every two weeks.

THE 57-FOOT SWEEPERS are usually manned by a crew of six enlisted men. This includes a chief or first class boatswain's mate or quartermaster who, as petty officer in charge, acts as CO; engineman; electrician's mate, boatswain's mate and two (sometimes three) seamen.

Each of the MSBs has a small corner in the bow which serves as a galley. In addition to a two-burner hot-plate, they are equipped with a sink, and an electric coffee pot which is usually in use from dawn to midnight. They also have a portable ice box aboard and a tank which holds 20 gallons of fresh water. With a small head and two built-in bunks, the MSBs are provided with sufficient accommodations for normal operations.

To qualify as petty officer in charge the chiefs and first class boatswain's mates or quartermasters who command MSBs must undergo extensive specialized training. The prospective MSB skippers are given a thorough course in visual and radio communications, minesweeping procedures and tactics, damage control, engineering, piloting, formation tactics and maneuvers, as well as seamanship and rules of the road.

These senior enlisted men assigned duty as MSB skippers are given responsibilities and opportunities that cannot be equaled in any other duty in the Navy. Although chiefs and PO1s are given command of landing craft, harbor tugs or other yard and service craft, MSB skippers regard such assignments as child's play.

Mine Force sailors have a lingo of their own. They talk in terms of "pigs," "oscars," "banana floats,"— "otters," "depressors" and "holidays." A "pig" is a float with a black and red striped minesweeping flag which shows the position of the sweep. "Banana floats" are not ordered at the ice cream store. They are used for holding afloat nonbuoyant electric cables used when sweeping influence-type mines. A "holiday" means a gap in a clearance-sweep of a harbor or sea lane.

OFF SHE GOES—MSB revs up and moves out. Top cruising speed is 12 knots.



LETTERS TO THE EDITOR

36—44—38

SIR: My crew and I liked the article on USS *Constitution*, "Old Ironsides Sails Again," which appeared in the February 1964 ALL HANDS. There's only one point we'd like to set straight.

You noted that "The crew point with pride to the fighting record of their 36-gun frigate."

In reality we point with pride to the fighting record of our 44-gun frigate. Of the six frigates authorized by Congress in 1794, and designed by Joshua Humphreys, three were 44-gun frigates (*Constitution, President* and *United States*), and three had 36 guns (*Chesapeake, Constellation* and *Congress*).—J. C. Kelleher, LTJG, USN, CO, USS *Constitution* (IX-21).

• *You're right, Captain.* Constitution *was rated as a 44-gun frigate. It* appears ALL HANDS *misfired in the gun count when preparing the article to which you refer.*

Though it still doesn't come out to 36, *we might point out that Old Ironsides could carry more or less than* 44 *guns, and initially had* 38.—ED.

Enlisted Advancement

SIR: How many times a year are enlisted men advanced in rating? I heard that it has been increased from two to four times. If this is so, how does it work? Which men are advanced on the two extra advancement dates?—J. E. T., QMSN, USN.

• *Implementation of "primary" and "secondary" advancement dates took place at the time of the February 1963 Navy-wide examinations for advancement to pay grades E-4 through E-6. For the February exams each year the primary advancement date is set as 16 May and the secondary date is 16 July. For the August exams the dates are 16 November and 16 January.*

The February 1964 exams were an exception to this system, since both increments were published simultaneously. However, additions to the second increment are anticipated, and personnel who were quota'd or designated strikers may still have a chance for advancement on the 16 July 1964 advancement date.

This new system was initiated to give everyone a better chance for advancement. Here's the Bureau's thinking on the matter:

First, the Navy must observe limitations on the number of men it can have in each pay grade. It is authorized so many E-4s, E-5s, E-6s, and so on. This total number of men in each pay grade is divided up among the 65 ratings on the basis of over-all requirements.

Just as there are always men coming into the Navy, there are men leaving the Navy for various reasons—retirement, medical disability, expiration of enlistment, and other causes. To maintain its petty officer strength, the Navy must project the estimated loss of men over a certain period and arrange to fill the vacancies in each pay grade.

So advancement exams are administered, giving everyone who is qualified a chance to move up the ladder. As a result of each examination, some individuals who fulfill all of the eligibility requirements for advancement and pass the exam may not be advanced, due to quota limitations, because they were not high enough up on the list of final multiple standings.

Between that time which the Navy's projected figures cover and the time of the next advancements, however, additional vacancies will normally occur.

With the new four-times-a-year advancement procedure, these vacancies can be filled earlier than was possible before by drawing on this pool of qualified personnel who were quota'd on the primary advancement date. It also spares these fortunate individuals from competing in another exam, as was the previous procedure.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Personal Flags on Cars

SIR: I have often wondered why an officer who is entitled to display a personal flag or command pennant may, when he's in a gig, fly his pennant. When he is on land, however, and is riding in an automobile on an official call, he cannot.

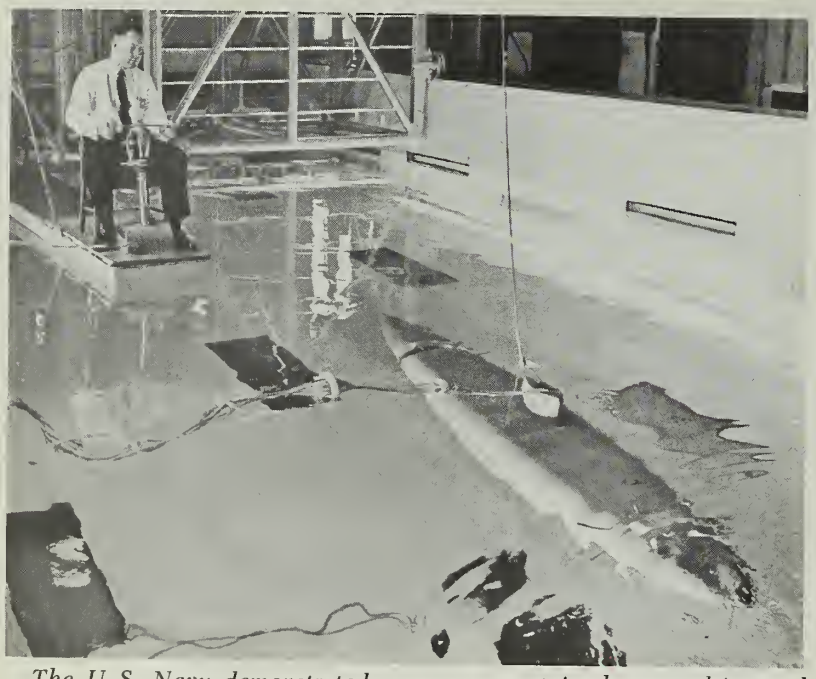
How come? It seems to me he should be entitled to his pennant regardless of whether he is on land or on the sea. —G. L. S., SN, USN.

• *You may not have seen it done, but any officer who is entitled to a personal flag or command pennant may display it when riding in a car on an official occasion.*

When and if he does so, the flag or pennant should be forward on the vehicle according to information contained in Article 147.3 of DNC 27.—ED.

AIR TRAVEL — The Navy's 22½ ton SKMR-1 hydroskimmer kicks up spray while 'flying' over the surface of water during initial testing.





The U. S. Navy demonstrated a new concept in the propulsion and control of submarines recently at the David Taylor Model Basin in Carderock, Md. Utilizing tandem, counter-rotating propellers, this 13½-foot model was moved up, down and sideways, and rolled, pitched and hovered in an exact position. CDR F. R. Haselton, USN, who is developing this concept, is able to perform these maneuvers without the benefit of conventional rudder or bow planes. Wrap-around propellers are located on each end of the model, and control is obtained by varying the pitch or angle of the blades. Preliminary analyses indicate good rates of speed and great maneuverability are attainable with this system. The potential application of this concept to deep submergence, manned combat and oceanographic research craft is now under study.

This Rumor Won't Get Off the Ground

SIR: I have heard rumors that the Bureau may change the radioman "B" school graduate NEC (RM-2312) to a 3300 series code. If this is true, when is it to take effect?

Another question: Can a radioman class "B" school graduate convert to a more critical rating, such as ET, DS or AT?

Also, can an RM be assigned as an aircrewman in a squadron and draw flight pay?—V.S., RM2, USN.

• *Rumors are flying but RMs are not, and your little rumor shouldn't be either, as there is no sound basis for it. There is little, if any, connection between the type of work radiomen are qualified to perform as a result of completing RM class "B" school, and the type of highly specialized work required of personnel who might be assigned an NEC in the 3300 series.*

If you checked the "Manual of Navy Enlisted Classifications" you would know that the 3300 series codes are used to identify personnel who are specifically qualified in fields which relate directly to Nuclear Power or to the Fleet Ballistic Missile weapons system. Simple reasoning will help you to see that RM class "B" school does not qualify you to weld on a nuclear power plant or repair an inertial navigation sub-system or a Mark 17-2 launcher.

Secondly, there is nothing to prevent you from requesting a change in rating. Your personnel office has the information you would require. But if you decide to request a change (in accordance with BuPers Inst. 1440.5 D), we suggest that you don't build your hopes too high that the request will be granted. A decision would be made based on the needs of the service, and since the RM rating is presently undermanned, your chances would probably not be too good.

About becoming an aircrewman to draw flight skins, aircrewmen are drawn from aviation ratings — which is understandable — and only under unusual circumstances, such as when a special project requires specific assistance from an RM, would this rating be used as a source for crew assignments.—ED.

Just Another Rumor

SIR: Here it is, just as I heard it: Congress is considering a bill which will permit married men, E-4 and below, with under four years' service, to be separated if they so desire. Is this true or false?—J. T. C., RMSN, USN.

• *False, so far as we can determine. The Bureau knows of no such plan under consideration. Rivers of rumor seem to spring from a trickle of fact. In this case, the hearsay probably stems from last year's Presidential decision to cease inducting married men into the armed forces.*—ED.

Investigator Shows Spirit of 76

SIR: In March, USS *Investigator* (AGR9) returned to her home port of Davisville, R.I., after an absence of 100 days, 76 of which were spent patrolling radar picket stations.

Although we don't know for sure, we suspect that this is a record for time underway in the North Atlantic for any continuous hundred-day period.

Incidentally, we define North Atlantic as the area north of 38 degrees and from 69 degrees west to the Greenwich meridian. — T. L., LTJG, USN.

• *We have heard some pretty rugged tales of picket duty in the North Atlantic with extensive periods underway. Yours rates high.*

Bearing in mind your definition of North Atlantic, we will, as they (heh, heh) say on Madison Avenue, run your record up the flagpole and see who salutes it.

ALL HANDS *will be the first with a salute—not because* Investigator's 76 *days may be a record but because she achieved something noteworthy.*—ED.

Adoption in Spain

SIR: I am due to be transferred ashore early next year and have considered making a request for overseas shore duty in Spain. My decision, however, depends upon the answers to several questions.

If I received orders to Spain, and my family accompanied me, could I adopt a Spanish child?

If transferred, could I travel with my dependents? What about pets? Any additional information on Spanish shore duty would be appreciated.—D. M. C., AMH, USN.

• *Your eligibility to adopt a Spanish child is governed by Spanish law. Adoptions in most countries are handled on a personal basis, with family qualifications taken into consideration. Therefore, we suggest you get in touch with the nearest Spanish Consul or write to the Spanish Embassy, 2700 15th Street N. W., Washington, D. C.*

We can tell you, however, that U. S.



CO PRESENTS—LTJG S. L. Nickens, USN, of USS Kearsarge (CVS 33) receives a commendation for his work as training officer of the carrier.

law does not prohibit the adoption of alien children by a Navyman. Under our law an adopted child may be considered for a non-quota immigration visa if the child was adopted while under the age of 14, *and if he thereafter has been in the legal custody of the adopting parents for at least two years.*

If you should be assigned Spanish shore duty and are successful in adopting a child, you should consult the U. S. Consul nearest your duty station and inquire about the eligibility of the child for an immigration visa. The Consul will also advise you on the proper procedure in procuring the necessary documents.

Concerning your second question, concurrent travel is not normally authorized in the Rota area, where there is a housing shortage. In Rota you must check in and place your name on the housing list. When you receive housing (you will probably wait 20 *weeks or longer) you may send for your dependents. Elsewhere in Spain concurrent travel is authorized.*

You may take pets to Spain, but they may not be transported aboard a MATS *aircraft.*

For further information on duty in Spain, we refer you to the Bulletin Board article in ALL HANDS, *April* 1964.—ED.

Carriers by the Numbers

SIR: While leafing through a 1961 issue of ALL HANDS, I found an article on aircraft carriers. You had listed all carriers (except CVEs) by name, their status, and their hull numbers.

But you didn't mention numbers 35, 44, 46 and 48 through 58. And, for that matter, what happened to *Wolverine, Sable,* and the CVBs?—R. B. L., ATC.

• *With the exception of 48 and* 49, *the hull numbers you listed were never commissioned carriers. Number* 44 *was to have been a CVB, but was canceled in 1943. CV 35, which was to have been* Reprisal, *CV* 46, *to be named* Iwo Jima, *and* 50 *through* 57 *were canceled just before the war ended. CVA* 58, *which was to be named the* United States, *was canceled in* 1959.

Numbers 48 *and* 49 *were finally commissioned as light aircraft carriers (CVLs)* Saipan *and* Wright, *respectively.* Wright *is now CC* 2 *and* Saipan *was to be CC* 3, *but her conversion was recently canceled.*

The CVBs (carriers built on battleship or cruiser hulls) which remained in commission after the first CVAs joined the Fleet were redesignated attack carriers.

USS Sable (*IX* 81) *and* USS Wolverine (*IX* 64) *were different, to say the least —we're sorry we didn't include them in the article. They were experimental side-wheelers, and operated as training carriers on the Great Lakes during World War II. They obviously had no place in the modern Navy, however, and when the armistice was signed they were sold for scrap.*

Hull numbers are often confusing. You'll notice that, though the numbers for each type of ship usually run in sequence, the side-wheelers IX 64 *and IX* 81 *do not follow the pattern. This was because they were classed not as carriers but as experimental ships—and vessels in that category were numbered consecutively, regardless of type. The two odd flattops just happened to be experimental ships* 64 *and* 81.

Irregularities in the numerical order of hull numbers on standard type ships

BIRTHDAY BALL — Alecia Uszynski is crowned Roosevelt Roads Seabee Queen of 1964 by Captain Henry C. Bridgers, Jr., CO of the Station.





THE OUTSTANDING Naval Aviation Cadet of 1963, Ensign William M. Myers, is received by President Lyndon B. Johnson in Washington.

are usually due to construction cancellations. Hull numbers are assigned when the construction contract is awarded, and pertinent paperwork (stacks of it) is identified by this number. It's obvious why, when a contract is canceled, the Navy does not use the same number again. We hate to think of the confusion which could ensue.—ED.

There Are Two Tear-Sheets

SIR: The Feruary 1964 issue of ALL HANDS contained an article titled "Exam Tear-sheets Will Help Guide You in Your Studies." You said tear-sheets were to be mailed to men who were scheduled to take the February advancement exams.

To men in all paygrades? Is the tear-sheet similar to the one attached to the exam booklet?

I took the test for engineman chief on 4 February. There was an attached sheet with the question booklet, but I received nothing before that time. As far as I know, neither did the other men in my district.

If the form mailed from the Exam Center is the same as the one I received after I took the test, it tells what subjects will be covered on the exam itself. In this case, the men who do not receive the tear-sheets are at a definite disadvantage.

This year, for instance, many subjects important to the engineman rating were not covered on the test: Evaporators, air compressors, hydraulics, lathes, boilers and associated steam equipment. If those who received the tear-sheet knew these items would not be on the exam, the rest of us were beaten before we started.—D. L. H., EN1, USN.

• *We won't try to guess why you*

didn't receive the advance tear-off sheet. The paperwork machine must have slipped a cog—but it doesn't really matter. The advance sheet is merely a convenience, and the lack of it probably didn't affect your chances for advancement at all.

We can sympathize with your protest, however, since you didn't know the two sheets were different.

The information sheet which you should have received before the exam was simply a list of publications with which all good ENCs should be familiar. The same information was available in the "Manual of Qualifications for Advancement in Rating" (NavPers 18068-A) and the "Training Publications for Advancement in Rating" (NavPers 10052-K).

The material covered by the bibliography includes not only those subjects to be covered on the test, but all topics applicable to the rate or rating in question. In other words, ENIs who competed with you on the test should have studied evaporators, air compressors, boilers and associated equipment just as you did.

The advance sheet gave no clues as to what would not be covered by the examination.

The February 1964 tear-off sheet listed four publications to be studied by prospective ENCAs: "Engineman 1 and C" (NavPers 10543-A), "Diesel Engine Maintenance Training Manual" (NavPers 16179), "Engineering Administration" (NavPers 10858-B, chapters 2, 7 and 10) and the "BuShips Technical Manual" (chapters 4 and 6). In addition, it listed study materials for lower rates, which should have been reviewed.

Navymen like yourself who were on the ball would have studied those pubs anyway, since they were listed elsewhere.

The tear-off sheet attached to the exam (the one which you did receive) has an entirely different purpose. It is the key to the profile card (mailed to those who fail the exam or are "quotaed") and is designed to help illustrate your weak points so you can do better next time.

But the information contained in this sheet concerning the material actually covered by the examination is not made public before test time.—ED.

Sharp Eye of FTC Spots Target

SIR: We have a question concerning the proper sequence of giving commands for spotting gunfire.

My contention is that when spotting gunfire against any target—surface, air or shore—the correct spotting sequence is to spot *deflection first* and spot *range last*, with elevation spots given in between when they are required.

The 1957 edition of the GM2 training course (NavPers 10184) says the opposite: *Range spots first* and *deflection spots last* against surface targets.

Which is correct?—M. R. V. G., FTC.

• *First, Chief, for the benefit of those readers who are not familiar with the terms used in your query, we would like to offer some definitions.*

"Spotting" is the act of estimating how far the shots fired from a ship's guns are missing the target, and making a correction of the aim. The fire control technician and gunnery officer have many facilities at their disposal to help accomplish this task, but still it's a difficult art—one that these men spend a great deal of time on study and practice to master. Very often the ship's fate could rest solely on the proficiency of the spotters.

Unfortunately, no matter how accurately the guns and instruments may be aligned, there is always the possibility of error. Therefore, the ultimate responsibility for hitting rests with the spotters.

When spotting gunfire, range *refers to the distance measured parallel to the line of fire, while* deflection *is measured at right angles to the line of fire. Very simply, by increasing or decreasing the range of a shot, after determining where the previous shots landed, spotters can compensate for a miss that landed either in front of or beyond the target. They order the guns to "add" so many yards to increase range, and to "drop" so many to decrease range.*

To compensate for deflection, spotters order the guns to train "left" so many mils if the previous shot landed to the right of the target, and vice versa.

Now, from a fire control technician's point of view, you are correct when you say that deflection is spotted before range. Let's face it, if your shots are landing off to the right or left of your target, it behooves you to get on line first, then try to correct the range. The range of your shots is more accurately displayed in this way.

From a gunner's mate's point of view the situation is a little different. First of all, a gunner's mate is not likely to act as a ship's spotter. His spotting jobs will usually be restricted to the occasions when his 3-inch or 5-inch mount is on local control, and as such, it actually doesn't matter a whole lot which he spots first — range or deflection — when firing at a surface target. Often on local control a spotter will spot in range and deflection on the same salvo.

However, in the GM2 *training course, the writer has used the phrase "usually in that order" when referring to spotting range before deflection. And he goes on to say that if the first salvo is far off in deflection, you may have to spot in deflection first so that you can see if the splashes of your next salvo are over or short.*

All this said, since it does matter to the fire control technician which command is given first, the writer of the "GM(G) 3 & 2 Manual" (which is now undergoing revision) has been asked to change the wording so as to make it correspond with the information in other ordnance and gunnery publications. And thanks for calling attention to the point.—ED.



A BLOWOUT — I. L. Couch, BM1, USN, one of 29 USS Topeka (CLG 8) plank-owners still on board, joins celebration of ship's 4th birthday.

'PLANK-OWNER' S. J. Bellamy, RD1, greets fifth captain to take command of USS Tracer (AGR 15) since the ship's commissioning in 1958.



Some People Like It That Way

SIR: Your description of the anchor chain and chain lockers aboard an AKA (ALL HANDS Letters, February 1964) was of particular interest to myself and others who are not in deck ratings.

Only one thing confused me. You

noted that the AKA with two 11,000-pound stockless anchors carries about 180 fathoms of chain on the port side, and 120 fathoms starboard.

You neglected to point out why one of the ship's anchor chains is longer than the other.—G. R. L., CT2, USN.

• *The ship in question was provided with a total of 300 fathoms of anchor chain. This chain would normally be divided equally between the port and starboard anchors, or 150 fathoms each. It seems, however, that operating personnel often develop a certain "feel" for anchoring their ship. Many prefer to use a longer chain under certain circumstances.*

In the case of the AKA permission had been received to alter the length of the two 150-fathom chains by removing shots (15-fathom lengths of chain) from one side and adding them to the other. Most routine anchoring is then accomplished with the shorter chain. The longer one is for special mooring problems.—ED.

All Bark and No Bite

SIR: On page 17 of the February issue, you pictured a four-masted vessel *Falls of Clyde*. In the story you refer to her as a bark.

I trained on a barkentine for two years, and it is my recollection that a vessel with four, square rigged masts is called a four-masted ship.

According to my dictionary, a bark is a three-masted vessel which has the fore and mainmast square-rigged and her mizzenmast fore-and-aft rigged. A four-masted bark is fore-and-aft rigged on the spanker. How about it?—E. C. R., CDR, USNR.

• *You're right on all counts except one.* Falls of Clyde *is a bark.*

She is configured as a four-masted sailing ship in the drawing, but you'll notice we covered ourself in the caption when we said she looked that way at the turn of the century.

Shortly after the picture was painted, the vessel changed hands and the new owner, Captain William Matson, rigged her fourth (or jigger) mast fore-and-aft. She was then a four-masted bark, and presumably remained so until de-masted in 1926 to serve as a floating fuel depot.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Philadelphia* (CL 41) — The first reunion is scheduled to be held at the Warwick Hotel, Philadelphia, Pa., 10-15 August. For information, write to Frank J. Amoroson, 93 Dunbar St., Somerset, N.J. 08873.

• USS *Wichita* (CA 45) — The first annual reunion will be held at the Nansemond Motor Hotel, Norfolk, Va., 26-28 June. Details are available from Joseph A. Glass, 111 Dupre Ave., Norfolk, Va. 23503.

• *82nd Seabees, 519th CBMU* — The 18th annual reunion is scheduled for 20-22 August at the Statler Hilton Hotel, New York City. For details, write to James Greenwood, RFD 1, Box 44B, Forked River, N.J. 08731.

• *Battleship Association* — A reunion is scheduled for 6-9 August, in San Diego, Calif. Information is available from David C. Graham, American Battleship Association, P. O. Box 11199, San Diego, Calif. 92111.

• *Submarine Veterans of World War II* — The 10th annual convention is being held 5-9 August in San Francisco, Calif. For further details, write to Ray Tiraschi, 1 Southern Heights Ave., San Francisco, Calif.

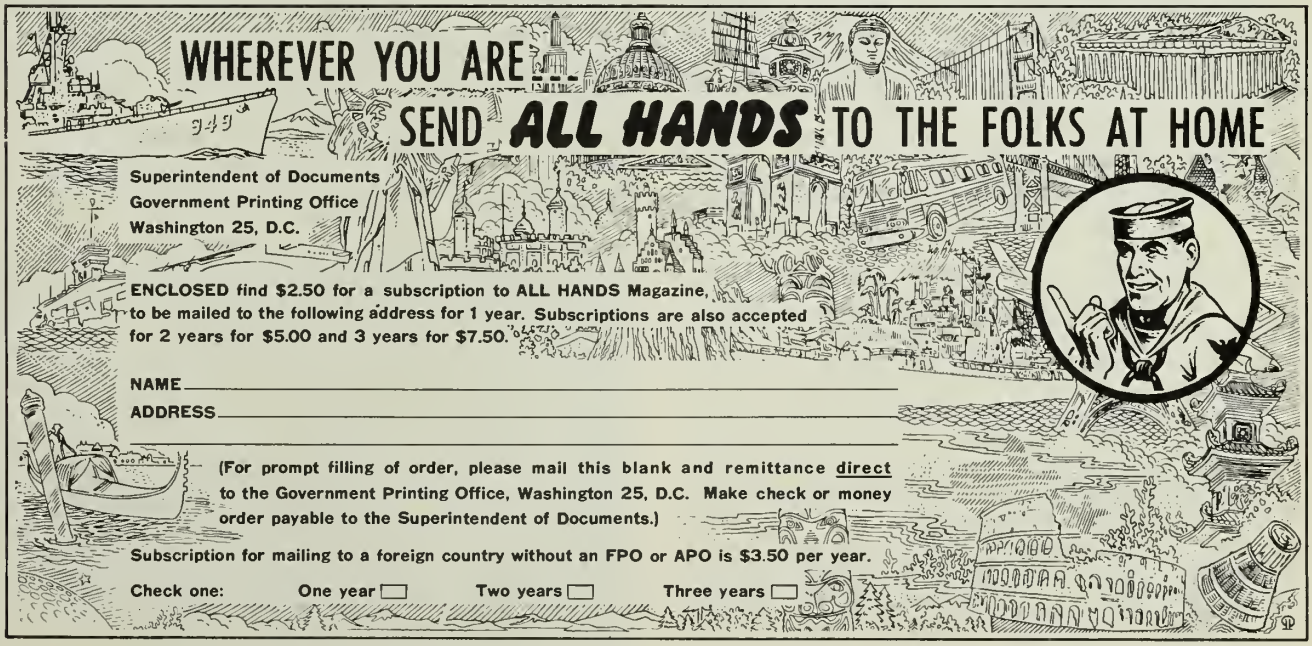
• USS *Bunker Hill* (CV 17) —A reunion is being planned, with time and place to be designated by mutual consent. Those interested may write to Edward O. Bedsole, P.O. Box 1323, Mobile, Ala.

• USS *Canberra* (CA 70) — Shipmates who served on board between 13 Oct 1943 and 13 Oct 1946 who are interested in holding a reunion in Boston, Mass., are invited to write to Charles J. Consalves, SMCA, USN, U. S. Naval Degaussing Station, Charleston, S.C. 29408.

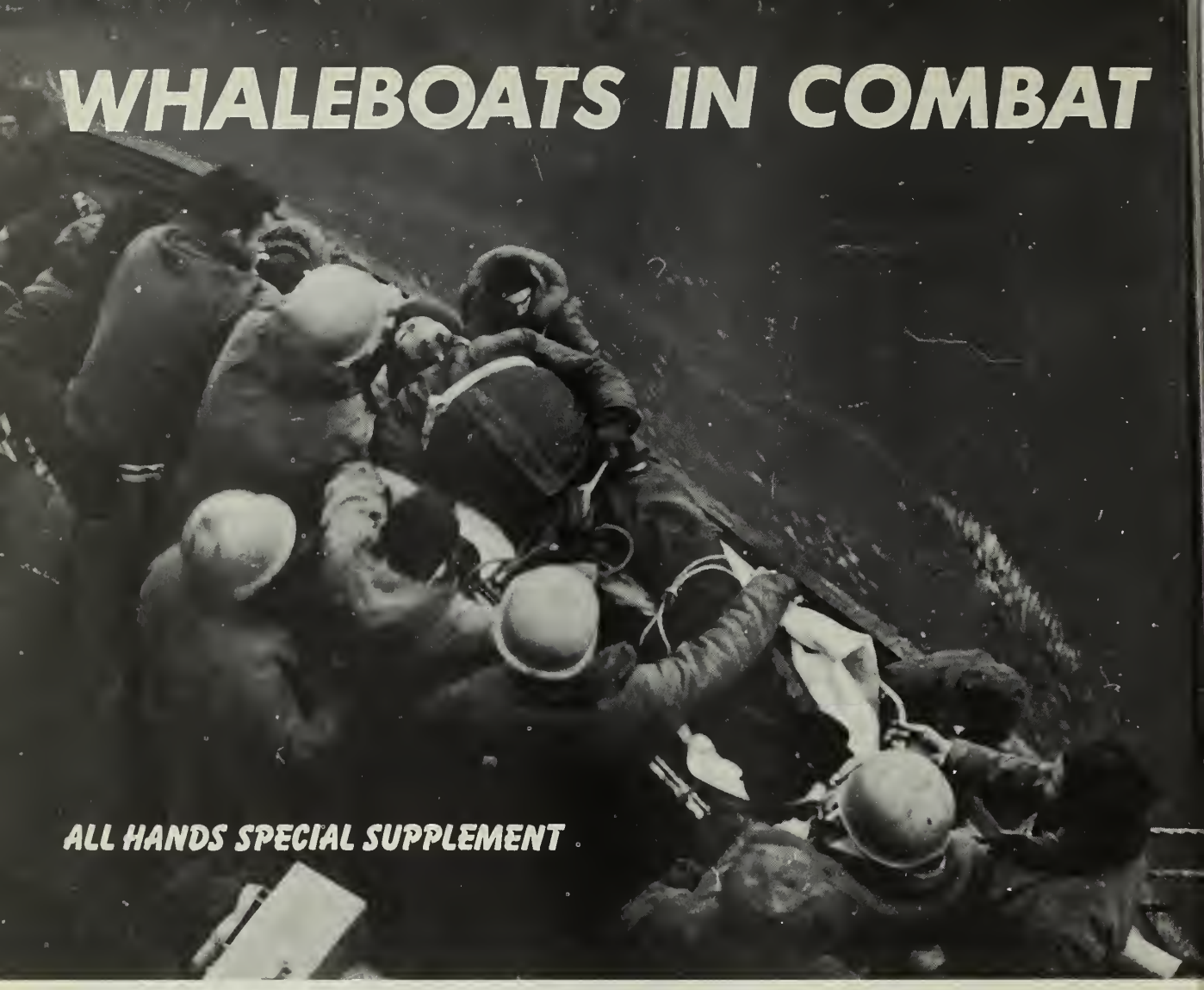
• USS *Chicago* (CA 29) — A reunion is being planned for early fall in the Chicago area. For details, write to L. R. Thomas, CSC, USNR., 18 South 3d Ave., St. Charles, Ill. 60174.

• USS *Edison* (DD 439) — All who served on board who are interested in holding a reunion with time and place to be designated by mutual consent may write to George A. Giovannucci, CTCS, USN, 416 Nansemond Ave., Lakeland, Fla. 33801.

• USS *Valencia* (AKA 81) — A reunion is planned for those who served on board during 1945-46, at a time and place to be decided by mutual consent. Write to Ed Massengill, RFD No. 6, Box 324, Goldsboro, N.C.



WHALEBOATS IN COMBAT



ALL HANDS SPECIAL SUPPLEMENT

WOUNDED COMMANDO, Donald M. Flaherty, DC2, is lifted aboard *Halsey Powell* (DD 656) from whaleboat.

Heroes are found at strange times and sometimes under unusual circumstances. Normally you wouldn't expect the crew of a whaleboat to be mixed up in heroics, but this was the case on a number of occasions in the Korean conflict. The following account is reported from the files of ALL HANDS *back in May 1953.*

WHALEBOATS HAVE SERVED many functions in their day, but it would take some stretch of the imagination to put them in the category of modern combat craft.

That, however, was just the role the whaleboat played in the Korean theater, sometimes in hand-to-hand fighting.

For those who served in them, helping to extend the blockade of the Korean peninsula to the ultimate, war was sometimes a very personal thing indeed.

These pint-sized whaleboats — the same craft sailors Stateside used for liberty boats — performed an important job in helping to seal off the communist forces from communication by sea.

Of shallow draft, the boats could move into unswept areas close to shore where big, or even little, ships fear to venture. They proved themselves adept at intercepting enemy sampans that tried to sneak up the coastline at night to bring in supplies. They acted as "spotters" when the parent ship wanted to shell an enemy gun battery position or supply dump but couldn't get a clear view of the target because of an obstruction (the boat merely moved out to one flank where its crew could get a clear view to spot the salvos).

Two ships that used the wooden whaleboats to good advantage in the Korean theater back in 1952 were the small minesweeper USS *Murrelet* (MSF 372) and the destroyer USS *Halsey Powell* (DD 686).

The following accounts of their boats and boat crews reflect the topnotch skill and high courage required of the men who man the boats.

MURRELET was quite a ship herself. The minesweeper had chalked up an enviable war record before she even got into the whaleboat act. Once she destroyed an enemy locomotive with three-inch and 40-mm gunfire, tracking and "leading" it as you would an aircraft target. Her guns "air-conditioned" the fleeing engine until it exploded and careened off the track.

In 10 months of operating in Korean waters, *Murrelet* had swept 6720 miles of green water for mines, had come under fire 17 times and had been hit three times herself, fired more than 20,000 rounds of am-

munition of all kinds, shot up 13 sampans, damaged numerous enemy installations and silenced two communist shore batteries.

Her skipper, Lieutenant John O'Neill, USN, had even taken the ship into Wonsan harbor one day to pick up a North Korean general who wanted to surrender. Unfortunately, however another ship arrived first and made off with the general.

THE WHALEBOAT CREW reflected the character of the ship—it was hot to go. A system had been developed, a standard operating procedure, whereby the boat had been raising havoc among enemy sampans.

The system, worked out by the skipper and his engineering officer, Lieutenant (junior grade) William Gillen, USNR (who also acted as boat officer), made use of the same principles used by fighter director teams on aircraft carriers.

Murrelet's radar would pick up a contact, presumably a sampan creeping northward along the shoreline in the dead of night. The word to man the whaleboat would immediately be passed and the volunteer crew would run topside, clamber into the boat, grabbing rifles and carbines as they went. Then the boat would be quietly lowered into the water.

With the help of a simple radar reflector stuck on top of a pole mounted in the boat, the ship's Combat Information Center would guide the craft to the target by means of instructions relayed over the ship-to-boat radio. Taking the "vectors" fed to it from the ship, the boat would silently stalk the unsuspecting enemy until it came within hailing distance.

Then, a Korean interpreter, carried along for just such an occasion, Ensign Suh In Byuk of the ROK Navy, would jump up and shout in Korean, "Hands up! We've got you covered! Surrender or die!" If they were smart, the North Koreans would give up.

WHILE THE WHALEBOAT crew kept the enemy covered with their small arms, the coxswain would bring the boat alongside the sampan and a line would be thrown over and made fast. The enemy would be frisked and disarmed and the sampan would be lashed to the whaleboat and towed back to *Murrelet*.

This procedure not only gave Ensign Suh a chance to interrogate the North Korean prisoners in the hope of getting some intelligence information, it also added a



WHALEBOAT TOWS captured sampan to its ship after hunt. Korean coastline is seen in the background.



ANOTHER FIGHT COMPLETED—Sampan, shown tied to minesweeper, adds one more to long captured list.

number of sampans to the South Korean floating forces. Sampans and prisoners alike were turned over to the ROKs as soon as practicable. In the first month of the whaleboat war, this procedure brought about the capture of seven Communist sampans and 32 North Koreans.

One dark night, radar picked up another contact. "It's pretty small," came the report. "Probably a sampan." The usual story.

Word was quickly passed for the crew to man the boat. In addition to Lieutenant (junior grade) Gillen and Ensign Suh, there were Frank Kennon, BM1, USN, coxswain; John Bogard, QMS2, USNR, gunner and signalman; Calvin Chance, EN3, USN, engineer; James Shearer, SO3, USN, radioman; and Norman Cluke, SN, USN, Norman Brown, TN, USN, and Marvin French, SN, USN, crewmen.

The men picked up their rifles and carbines and climbed into the boat. The motor coughed, then caught.

A dim moon made uneven shadows on the water as the whaleboat moved off into the darkness. Gillen took his place beside the radio operator. Soon the radio vectors started coming in.

"Steer 275. It looks like two targets instead of one. They're in unswept waters approximately one mile or less from the shore," came the word.

Gillen murmued to Kennon who checked his compass heading and turned the helm slightly to come to the new course.

"Right ten. Steer 285," the radar coached. All was still darkness ahead.

"Hold that course . . . you should be about 2000 yards . . . you ought to see them . . ."

THERE THEY WERE—two sampans outlined in the gloom. In the first one were six men, in the second four. Gillen ordered all hands to cover the intruders with their small arms while Suh stood up and hollered for the sampan crews to surrender.

The North Koreans threw up their hands and Kennon started to bring the whaleboat alongside.

Suddenly, one of the enemy reached down, grabbed a hand grenade and threw it straight at the approach-

Bronze Star Medal
(With Combat "V")
Lieutenant (jg) William F. Gillen, USNR

"For heraic achievement os afficer in charge of o valunteer armed whaleboot crew ottached ta USS Murrelet (AM 372) during aperatians agoinst enemy oggressor forces in Hongwan Raods, Karea, an the night of 31 May 1952.

When on enemy hond grenade landed in the whaleboot, killing the coxswain, waunding two athers and badly domaging the hull af the boot while the craft was engaged in an attempt to copture two hastile sampans and their accamponying troaps deep in unswept woters, Lieutenant Gillen, undeterred by the suddenness af the ottock and the ensuing hoil af smoll-arms fire, immediately rallied his men, directed effective counterfire upon the enemy ond, althaugh exposed to hostile fire, mode his woy fram the baw ta the stern to regain contral af the boat.

With the enemy farce destroyed withaut further cosuolties ta his crew, he skillfully directed his craft thraughout the hazardaus return trip ta Murrelet.

By his marked courage, inspiring leodership ond unswerving devotian to the fullfillment of o vitol missian, Lieutenant Gillen was largely respansible for the survivol of the autnumbered crew af the whalebaat and upheld the highest traditians af the United States Naval Service."

ing whaleboat. There was a deafening explosion in the after end of the boat.

Kennon, the coxswain, was killed outright and slumped to the deck beneath the tiller.

Gillen, shaken by the concussion, quickly recovered and yelled to his men to open fire. He himself rushed back to the stern to regain control of the boat. Cluke, although wounded in the leg by the blast, also hobbled back to help.

The others let go a hail of fire that cut down the North Koreans and riddled the two sampans like sieves.

The threat eliminated, all hands now turned their attention to the damaged boat.

A two-foot hole had been blasted in the side near the waterline and water was pouring through it. Gillen ordered lifejackets to be stuffed in the hole to staunch the flow. Other men bailed with their steel helmets or gave first aid to the wounded. In that fashion, the crew made its way back to *Murrelet*.

For this action, Bronze Star Medals went to Lieutenant (junior grade) Gillen, Quartermaster Bogard, Sonarman Shearer and Seaman French. Letters of Commendation went to Engineman Chance, Seaman Cluke and Stewardsman Brown. Cluke and Brown, both wounded, also received Purple Hearts.

THE CREW of the destroyer *Halsey Powell's* whaleboat had a similar story to tell. Theirs was a hit-run commando raid staged to neutralize an enemy build-up of materials at a spot the destroyer's guns themselves could not reach.

During operations in the vicinity of Hungnam on the North Korean coast, *Halsey Powell's* commanding officer, Commander Francesco Costagliola, USN, had noticed increased enemy activity on the little two-by-four-mile island of Hwa. If the Communists succeeded in fortifying it, Hwa could control the entrance to the harbor.

Reconnaissance runs by the ship's two whaleboats confirmed Commander Costagliola's analysis. The whaleboat crews described how they had seen men ashore piling equipment into warehouses. They added that the buildings were pressed up against a protecting cliff on the mainland side of the island. It would be almost impossible for *Halsey Powell* to fire over the island and make a hit, and just as impossible to try to make a run with the destroyer into the unswept, shallow channel that separated the island from the mainland.

The ship's gunnery officer, Lieutenant J. E. Chambliss, USN, came up with a possible solution — a commando raid. That might work, the skipper agreed, if the whaleboat only packed a little more firepower. Now, say the boat crews could carry a bazooka or two. . . .

When the ship returned to Sasebo, Japan, for routine overhaul, this idea was presented to staff members of the UN Blockade and Escort Force.

THE WHEELS TURNED, and soon a 75-mm recoilless rifle and a 3.5-inch bazooka, on a short-term loan from the Army, made their appearance on board the destroyer.

Both weapons, any gunner's mate will tell you, pack a terrific wallop for so small a piece. Both are part of the Army's program to develop a "family" of "vest-pocket artillery" pieces that can be carried by the foot soldier. The bazooka, for example, with a good hit can stop the toughest tanks known.

No sooner had *Halsey Powell* arrived back on the bombline when Commander Costagliola received a query from the Commander of the Blockade and Escort Force requesting information "on the current situation at Hwa-do." The information was sent — then the ship's officers sat down to discuss what more could be done to eliminate the trouble spot.

It was decided to send in the two whaleboats, armed with their new-found weapons, in a surprise attack to destroy the build-up area. Lieutenant Theodore Curtis, USN, was put in charge of the mission and placed himself in the lead boat. Ensign James Winnefeld, USN, the ship's shore fire support officer, was second in charge and took over the second boat. The code name for Curtis's boat was "Hawk;" for Winnefeld's, "Falcon."

Arthur Talley, BM 3, USN, coxswain; William Harrison, RM 2, USN, radioman; and William Haynes, QM3, USN, Albert Schildt, TM 3, USN, David Powell, SN, USN, and John Wright, FN, USN, made up "Hawk's" crew.

With Winnefeld in the second boat were Donald Flaherty, DC 2, USN, coxswain; Wesley Pomoroy, GM1, USN, Roy Manning, RM3, USN, Matthew Laboda, EN3, USN, and Edwin Shorak, SN, USN, crewmen; and a Republic of Korea Lieutenant (junior grade) Kim Chong Hyuk, as interpreter.

ON THE CHOSEN AFTERNOON it was cold and there were patches of ice along the shoreline. The recoilless rifle and bazooka were carefully handed into the boats. In addition, every man had his own rifle or carbine.

The boats were lowered into the water and *Halsey Powell* herself took position at a point where she would have a direct shot off to one side toward "Lighthouse Point" on the mainland (where the North Koreans were known to have a shore battery) as well as

directly toward the build-up area at Hwa-do.

Thus far, no sign of life at either place. The boats began their journey toward the channel side of the island, sweeping wide to one side. As they made their way, the destroyer opened up with a blanketing fire spotted by Winnefeld in "Falcon." When it was apparent that the ship's fire could not effectively get at the buildings on the protected side, Curtis in "Hawk" requested permission to proceed into the beach and open up with the boat weapons.

Permission granted. "Hawk" and "Falcon" moved in. Winnefeld opened up with his 75-mm while "Hawk" laid off to cover. The 75, firing phosphorus shells, set fire to several buildings, fire that continued to blaze for several hours afterward.

Then "Hawk" moved in while "Falcon" covered, lobbing 8-pound shells from its bazooka into several other buildings, blasting them to splinters.

Winnefeld, seeing two undamaged sampans lying on the beach, veered "Falcon" over in that direction with the idea of towing the sampans back to the ship (sampans were desired for intelligence reasons). He ran the whaleboat up on the beach. Flaherty, armed with a Browning automatic rifle, jumped out and ran a short distance up the beach to cover his buddies while they cut the sampans loose and rigged them for tow.

JUST THEN, the enemy evidently woke up to what was happening. Small-arms fire began to zig ominously around the raiding party.

"All right, Jim, let's get out of here," Curtis barked over the walkie-talkie between the two boats.

Winnefeld now saw he couldn't hope to get the two sampans and ordered them cut loose again. He ordered Flaherty back into the boat and yelled to the coxswain to give it full speed.

But an enemy sharpshooter had found the range. Two rifle bullets ripped through "Falcon's" side, hitting Flaherty in the foot and groin. Another shot snipped the headphones right off Harrison's head in the "Hawk," grazing a six-inch crease across the top of his scalp.

The boats at last drew clear of the danger area.

The wounded Flaherty was laid out in the bottom of the whaleboat and a tourniquet was fashioned out of a belt and wrapped around his leg.

While the coxswain was made comfortable, the boats continued the trip back. But their troubles were not yet over. A communist shore battery now came to life.

Curtis ordered everyone to duck down in the boats and directed Talley, the coxswain, to veer to the right to outrun the battery. Talley nudged the tiller over, then figured he'd better get down too. So he grabbed an M-1 rifle and slid to the deck, lying there on his back and steering the boat with the rifle.

Curtis radioed to *Halsey Powell* for covering fire to protect the withdrawal. The destroyer, its men standing ready at General Quarters, answered immediately. The shelling had the desired effect, for the enemy fire soon stopped.

BUT NOW "Hawk" began to lose oil pressure. Evidently one of the rifle shots from the beach had nicked the oil line. Since they were now out of range of the shore fire, Curtis ordered "Falcon" to proceed back to *Halsey Powell* with the injured Flaherty and told Talley to lie to and wait for "Falcon" to return. This the other boat did in a few minutes and towed "Hawk" back to the ship.



A SEIZED BOAT — Members of *Murrelet* crew inspect one of the captured sampans off enemy's coastline.

The wounded man was later transferred to the destroyer USS *Twining* (DD-540) for an emergency operation, then to the heavy cruiser *Rochester* (CA 124) and finally to Japan and back to the States to recuperate. He recovered and was then discharged from the Navy with a partial disability. Harrison's wound was only superficial and he returned to duty.

For their part in the operation, Lieutenant Curtis, Ensign Winnefeld, Damage Controlman Flaherty and Gunner's Mate Pomoroy were awarded the Bronze Star Medal with Combat "V". The others each got a Letter of Commendation.

Thus ended two exploits by the Navy's whaleboat sailors. And there were others. Each serves to illustrate the courage and resourcefulness demanded of men who were proving that even in the era of nucleonics and supersonics the small boat was still capable of playing a part in naval warfare.

Bronze Star Medal
(With Combat "V")
Donald M. Flaherty, DC2, USN

"For heroic achievement while serving as an automatic rifleman in a raiding and reconnoissance party from the USS Halsey Powell (DD 686) during a mission to reconnoiter and attack enemy installations on Hwa Do Island, Hungnam, Korea, on 6 February 1952.

Throughout the initial stages of the reconnaissance and attack on the island by the ship's two motor whaleboats, Flaherty greatly aided the raiding party in spotting enemy targets for Halsey Powell's batteries and in delivering effective fire on hostile barracks buildings and warehouses with a bazooka and a recoilless rifle. When the party attempted to capture two enemy sampans, he bravely moved to a position some 150 yards inland and covered his comrades with his automatic rifle while the vessels were cut loose and taken in tow.

Although hit by two bullets and seriously wounded when the unit was subjected to heavy enemy fire during the withdrawal operation, Flaherty—by his marked courage, daring initiative and selfless devotion to the fulfillment of a vital mission—contributed materially to the safety of his shipmates and to the disruption of enemy activity on the island, thereby upholding the highest traditions of the United States Naval Service."



Boats of t

A Navy boat is defined as a non-comm
as a service craft, and capable of limited
carried on, a ship as a ship's boat, or as
(This selection is representative and does

Prepared



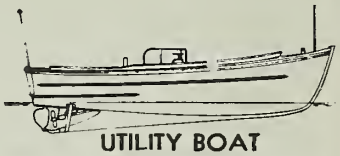
WORKBOAT

The workboat, larger than the punt, serves as a general purpose shipboard craft for various jobs.



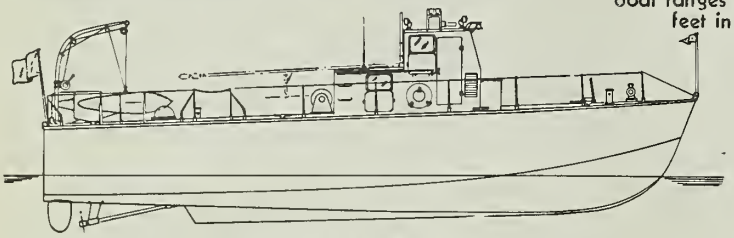
PUNT

This general purpose workboat ranges from 10 to 14 feet in length.



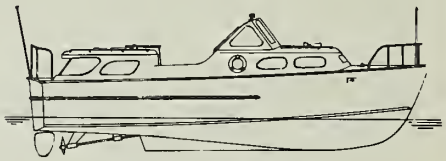
UTILITY BOAT

Main purpose is to transport cargo and personnel; 22 to 50 feet.



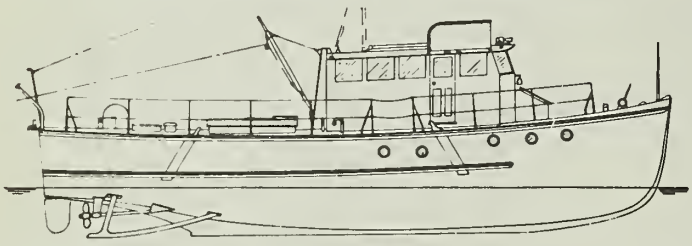
BOMB TARGET BOAT

The bomb target boat is used to tow aircraft targets. At full power and full speed, it has a range of 400 nautical miles.



PERSONNEL BOAT

As the name implies, personnel transport is the boat's prime function.

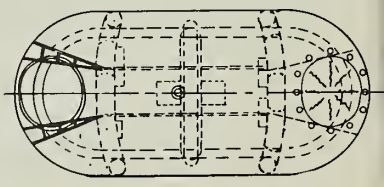


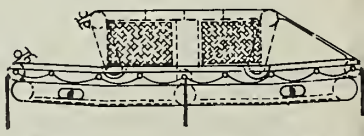
SOUNDING BOAT

The sounding boat is one of the Navy's larger ones. With its 10-man crew, the boat's purpose is to obtain soundings for the Navy Hydrographic Office.

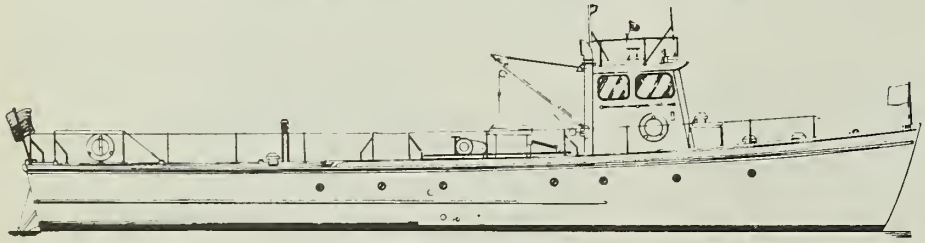
INFLA

The many CO_2 inflatable lifeboats in the Nav
cotton or nylon fabrics and





LIFEBOAT CO_2 INFLATABLE



TORPEDO RETRIEVER

Pictured above is a 63-foot torpedo retriever. The Navy also has 72-foot models. They are used to recover practice torpedoes.

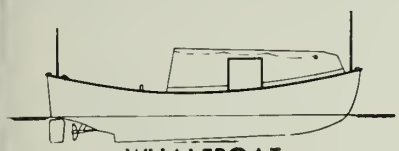




U.S. Navy

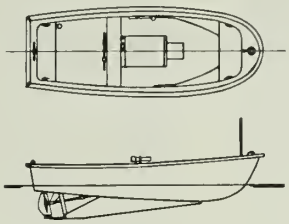
waterborne unit of the Fleet, not designated
lent operation. It may be assigned to, and
a shore station or a Fleet operating unit.
de all of the boats used in the U.S. Navy.)

DS Magazine



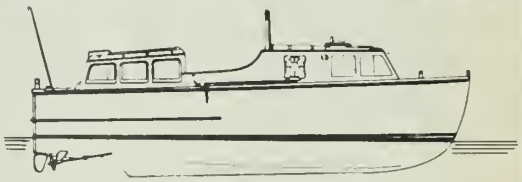
WHALEBOAT

Motor whaleboats are used as lifeboats and personnel carriers.



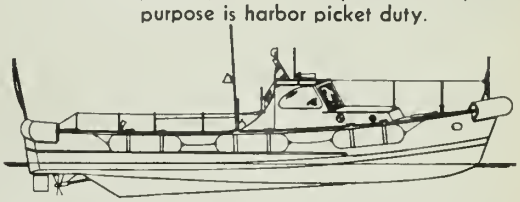
LINE-HANDLING BOAT

This boat is used for general purposes and to handle lines for seaplanes. It has a length of 20 feet and can carry six persons



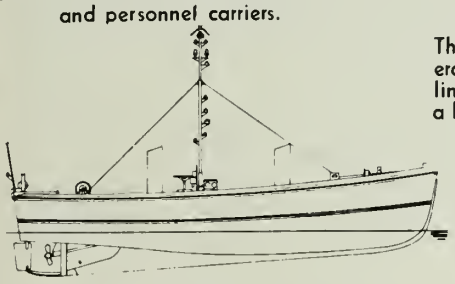
PICKET BOAT (DIESEL)

With a speed up to 13 knots, this boat's primary purpose is harbor picket duty.



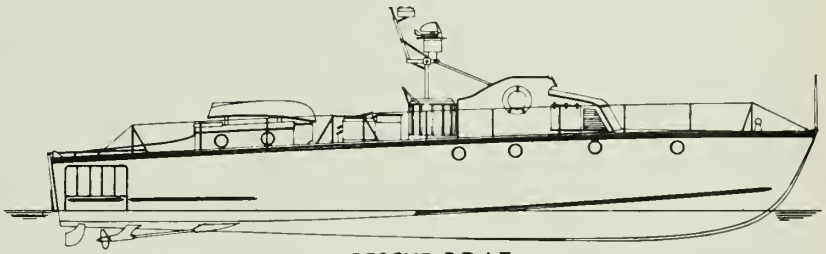
PLANE PERSONNEL AND RESCUE BOAT

Rescue work at air stations, firefighting and personnel transportation constitute this boat's duties.



MINESWEEPING LAUNCH

This is used in minesweeping of moored, magnetic, or acoustic mines.

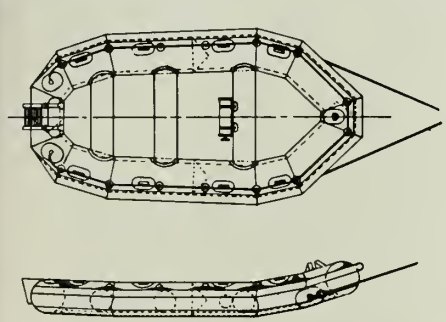


RESCUE BOAT

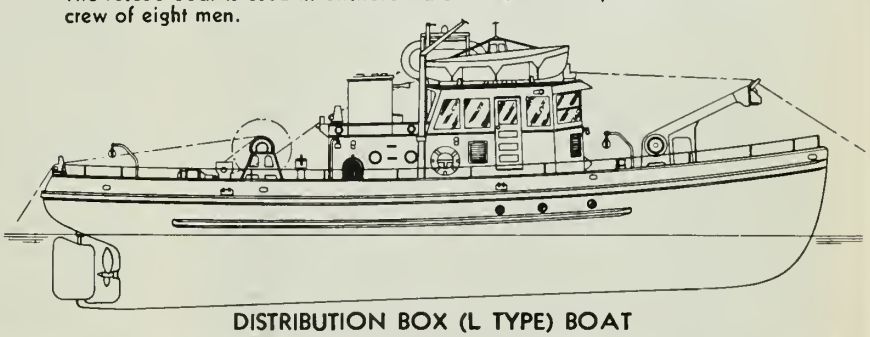
The rescue boat is used in offshore waterborne rescue operations. It has a crew of eight men.

E BOATS

are constructed of chemically (neoprene) coated
ted by means of CO_2 cylinders



10-PERSON CO_2 LANDING BOAT



DISTRIBUTION BOX (L TYPE) BOAT

The distribution box boat, one of the Navy's larger boats, is used to set and recover mine distribution boxes.





SERVICESCOPE

Brief news items about other branches of the armed services.

THE AIR FORCE is evaluating a simplified free-piston engine which does not need ignition systems, crankshafts, bearings or carburetors. It is essentially a tube with a combustion chamber in the center and an unattached piston in each end.

When fuel is ignited in the combustion chamber, the pistons are blown to the outer limits of the tube where they strike a cushion of air. The compressed air forces them back toward the center of the chamber, creating enough compression to touch off another explosion.

The engine is the brainchild of a computer programer whose hobby is inventing. He has built a 20-horsepower acetylene-powered prototype in his garage.

Friction, weight and size are greatly reduced by the elimination of rods, bearings and crankshafts. The inventor estimates that the new engine has twice the over-all efficiency of the conventional models.

Transfer of power is perhaps the greatest problem caused by lack of a crankshaft. The designer has suggested that the engine be used to create air pressure which could be transferred to mechanical power by means of a hydraulic motor.

★ ★ ★

THE ARMED SERVICES are participating in the New York World's Fair with a variety of exhibits and special events. On display:

- Ten full-scale rocket and spacecraft exhibits (U. S. Space Park).
- Nuclear detection satellite which demonstrates a method for detecting atomic explosions in space (Federal Pavilion).
- Space detection and tracking exhibit simulating the North American Air Defense Space Detection and Tracking Control Center (Federal Pavilion).
- Army "Man on the Moon" exhibit depicting lunar mapping program and environmental factors (Transportation and Travel Pavilion).
- "Army Mobility Looks to the Future"—exhibit of possible Army concepts for the future which includes a "land-walker" (Transportation and Travel Pavilion).
- "The Navy-Marine Corps Team Around the World"—film depicting a number of surface, air, and underwater transportation methods (Transportation and Travel Pavilion).
- Paintings from the Air Force Art Collection (Transportation and Travel Pavilion).
- Exhibit showing the mission of civil defense, sponsored by the Office of Civil Defense, Department of Defense (Hall of Science).



HOT ONE—Army's mechanized flame thrower is fired from the multi-purpose M-113 armored personnel carrier.

In the Army's "Man on the Moon" exhibit, slides and films show what may be found on the moon with regard to environment, dangers, and problems related to lunar exploration.

The Navy-Marine Corps "team" film is run on a special motion picture device developed by the Navy. The projector fans 35-mm color film over a 180-degree hemispheric concave screen 22 feet in diameter.

Performances by military bands and drill units were held on opening day (22 April), and a number of special commemorative days have been set aside for "salutes" to the services.

No separate admission charge is made for viewing the Space Park or various Department of Defense exhibits. Performances by service bands and drill units may likewise be viewed free of charge.

Military participation in the Fair will continue through 18 Oct 1964, and again from 21 April through 17 Oct 1965.

★ ★ ★

THE THREE TROPHIES awarded annually to major Air Force commands with the best records in safety and maintenance have gone to the Military Air Transport Service for 1963.

This is the first time all three trophies, awarded in recognition of flying safety, aircraft maintenance and motor vehicle safety, have gone to one command.

The flying safety trophy, which MATS had won three times before, and the motor vehicle safety award, were earned by MATS as a whole. The aircraft maintenance trophy went to MATS' 1502nd Air Transport Wing, Hickam AFB, Hawaii.

The flying safety trophy was first awarded to MATS in 1950, when the transport service had an accident rate of 7.3 per 100,000 flying hours. The accident rate dropped to 2.3 per 100,000 flying hours in 1964, and to 1.08 in 1961.

The 1963 rate was a record low, less than one accident per 100,000 flying hours.

★ ★ ★

A LAND NAVIGATION SYSTEM designed to tell a tank driver who operates in barren, unlandmarked areas exactly where he is at all times, is being checked out by the Army.

Among other things, the new navigation equipment permits the tank driver to report his position without relying on landmarks.

Developed by the Canadian Army with the help of U. S. Army engineers, the LNS consists of a gyrocompass, heading and position indicator, computer, map plotting board, and power supply.

The computer receives direction inputs from the compass, and distance data from an odometer. The map

plotter shows the vehicle's position and direction with a lighted dot and arrow. The map scale can be changed with a flip of a switch.

During tests of the LNS at the U. S. Army Armor and Desert Training Center, Fort Irwin, Calif., tank companies operating at night were able to respond quickly to commands for direction changes, and reached their objectives with pinpoint accuracy.

Further tests of the new equipment are scheduled to be held in Alaska and Europe.

★ ★ ★

INTELLIGENCE SOURCES report that the desert country of Nezona will declare unconditional war on neighboring Calonia in May. Anticipating this, the U.S. is mobilizing 100,000 men and preparing for conflict in the war zone.

U. S. units scheduled to participate in this desert war will be drawn from the Army and Air Force, and include two armored divisions, one airborne division, one mechanized infantry division, 15 tactical fighter squadrons, tactical reconnaissance and troop carrier squadrons of two tactical air forces, an Army Reserve brigade, two National Guard brigades, units of the Air National Guard and Air Force Reserve, two U.S. Strike Command Joint Task Force headquarters and two Army corps Headquarters.

It's all an exercise called Desert Strike, the largest United States joint military training exercise for 1964. The mythical country of Nezona is commanded by an Army lieutenant general and mythical Calonia is commanded by an Air Force lieutenant general.

The exercise will be conducted by the U. S. Strike Command May 17 through 30 on about 13 million acres of desert land in adjoining areas of California, Arizona and Nevada.

Desert Strike will be a semi-controlled exercise, allowing opposing forces a maximum of "free play" initiative to develop and perfect combat techniques and tactics. It is designed to provide extensive field training for armored and mechanized forces, and to a degree, airborne forces.

The Air Force units will operate from some 25 Air Force, Navy and Marine Corps airfields from Texas to Oregon.

★ ★ ★

A COMFORTABLE AND NON-CONFINING method of person-to-person communication in space is the subject of research by the Air Force.

One phase of research nearing completion has produced an experimental space helmet radio transceiver which uses a radio link instead of a conventional headset microphone cord. During the experiments, the transceiver (a combination transmitter and receiver) was battery powered.

The second stage of the program calls for an additional short-range voice communication system in which no battery would be needed—the power of the speaker's voice would be converted by the microphone to electrical energy for transmission.

In addition to having space applications, the new device would solve a long-standing problem of Air Force personnel who must use headset microphones for communications during missions and, as a result, are tied in place by the headset cord.

When it is developed, the short-range, cordless system, which requires no power supply, could be used in inter-communications in aerospace vehicles and to maintain communications between a space vehicle and a lunar exploratory party outside the vehicle.

The Air Force would like to provide comfort during long space trips—a condition not always possible with present-day headset microphone type equipment. Engineers visualize a transceiver attached like a corn plaster to a standard high altitude helmet; earplug designs with a transmitter in one ear and the receiver in the other; a headset similar to a pair of glasses and even tiny radios embedded in the skin or attached to ear lobes.

Models may be perfected to transmit not only voice communications but physiological data from the body to a telemetry, data-processing or display device.

★ ★ ★

ARMY MEN ORDERED to Korea or South Vietnam for duty exceeding 30 days must now receive gamma globulin inoculation, which protects them from the infectious hepatitis prevalent in both countries. Civilians accompanying the Army will also be immunized.

The Navy will put a similar plan into operation soon.

Original inoculation will be followed by another shot about five months later. Previously, the immunizations were given only to those who had been exposed to the disease.

Men who contract hepatitis, or epidemic jaundice, spend an average of two months away from duty. During 1963, one in every 100 Army men stationed in Korea was infected—about 10 times the percentage stricken while serving in other countries with the exception of Vietnam.



IN WILD BLUE — An Air Force B-58 on non-stop coast-to-coast and return flight is refueled by jet tanker.

CHARTING YOUR COURSE

TWO YEARS AGO, ALL HANDS presented a detailed description of the Seavey-Shorvey enlisted rotation program. That presentation, we like to think, helped erase many misconceptions with regard to the sea-to-shore and shore-to-sea transfer procedures.

Since that time, however, these procedures have been somewhat changed, and much that was said two years ago no longer holds true. In addition, revised estimates of billets ashore and afloat by rate and rating have been made. Charts and tables reflecting this and other information, along with another long look at Seavey-Shorvey in general, may be found on the following pages.

The Enlisted Rotation Program

The Navy's military and diplomatic commitments throughout the world require the operation and maintenance of more than 3000 ships, stations, squadrons, missions and other commands. The number, type and size of all Navy activities is determined by the Chief of Naval Operations. He also determines how many enlisted personnel are required for the operation of each activity.

At present, more than half a million enlisted men and women are needed to keep the Navy in operation—585,000, to be precise. The Chief of Naval Personnel is responsible for seeing that each activity has the right people in the right jobs at the right time. This is a complicated task involving assignments to some 140,000 shore billets, 310,000 sea duty billets, and 48,000 overseas billets. (In addition there are some 50,000 enlisted personnel training, while there are still others in transit, etc.)

Half a million enlisted personnel cannot be constantly shuffled from billet to billet. Therefore, stability must enter the picture and temper the assignment system. Stability means placing you where you are needed—when you are needed—for a reasonable length of time. Administrative functions, evolutions, and operations may then proceed with maximum continuity.

Whenever possible, every attempt is made to satisfy your preferences as to job and location of duty. The Navy knows that if you like your job chances are you will do it well.

Seavey-Shorvey

Your rotation between sea and shore is essential. Your career should be well rounded. You should be capable of performing a variety of jobs both ashore and afloat. For example, the operation of Fleet support activities ashore requires men who have had experience at sea. Instruction, recruiting, administrative, maintenance and operational billets are other shore jobs that need men with sea experience.

The primary tool used by the Navy for rotating enlisted personnel from job to job is the Seavey-Shorvey program. Basically, the Seavey, or sea duty survey, governs your rotation from sea to shore. The Shorvey—shore duty survey—is the program under which you are ordered to sea duty after completion of a tour ashore.

The length of your tour ashore or at sea is determined by the ratio of shore billets to sea billets for a particular rating. In ratings with more shore billets than sea billets, the normal tour of shore duty is longer than the sea tour. If a rating has more sea billets than shore, the tour at sea is longer.

From time to time it becomes necessary to change the length of shore tours to improve stability and manning levels. Such changes are made only after a lengthy review of all information, and are normally the result of allowance changes and continuing shortages of certain ratings for certain types of duty.

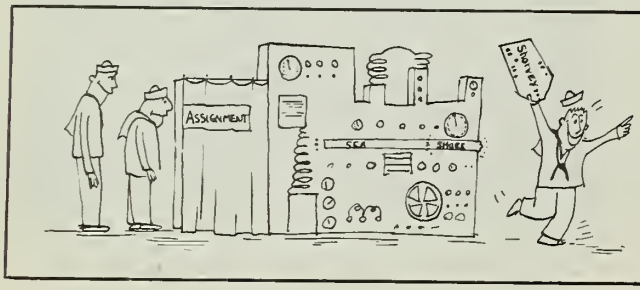
Because of certain distributional requirements, some rates, ratings and categories of personnel are under the direct rotational control of the Chief of Naval Personnel or Commanding Officer of the Enlisted Personnel Distribution Office, Continental United States.

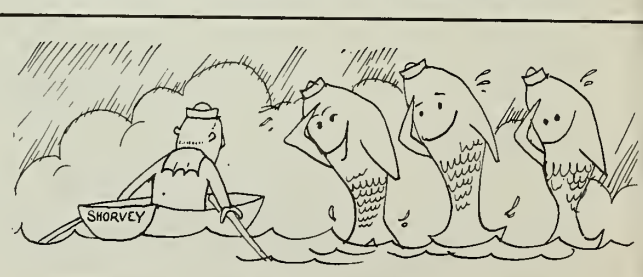
The following are not, therefore, included in the Seavey-Shorvey procedure: All personnel of the CT, AC, MU, MA and TD ratings; AGCs; Aviation Pilots; TAR personnel; men designated limited duty category L-5 and L-6, and enlisted women. (Waves are rotated under the recently established "Wavevey," a description of which may be found in the December 1963 ALL HANDS.)

PAMIs and EPDOs

The Navy's Enlisted Personnel Distribution Offices in San Diego, Calif. (EPDOPAC); Norfolk, Va. (EPDOLANT); and Bainbridge, Md. (EPDOCONUS) handle much of the work that insures your transfer to the right place at the right time.

The three EPDOs are serviced by PAMI's (Personnel Accounting Machine Installations) which, with the help of electronic computers and data processing equipment, give information to the officers who make the final decisions in assignment. The EPDO at Bainbridge maintains current records of all Navymen serving on general shore duty within the United States, and makes individual assignments to vacancies which occur in this area. The EPDO in San Diego is the distribution focal point of the Pacific Fleet, and the EPDO





ON SEAVEY & SHORVEY

in Norfolk is the manpower assignment center for the Atlantic Fleet.

The EPDOs, and their corresponding PAMIs, are linked to a master electronic data processing system which is operated by the Bureau of Naval Personnel. Manpower information which covers the status of each enlisted man in the Navy is fed into the network via high-speed transmitters and punch card equipment.

The manpower information network springs into operation at individual commands, or components of commands, which submit detailed personnel information to the appropriate PAMI. *This is one of the main reasons your personnel office keeps a daily diary, which includes such information as personnel transferred or received, information which pertains to the qualifications or status changes of individuals, and assignments desired upon completion of tours. Nearly all information reported on these diaries is used in personnel rotation.*

For obvious reasons, it is essential that diary information is submitted promptly and accurately.

The PAMI transforms diary information into code numbers which are punched into cards. (This is where your individual data cards are first compiled.) The punched cards are then fed into a computer processing unit which controls a system of magnetic tape recordings. From the information contained in the cards, the tapes are brought up to date and copies are forwarded to the Bureau. Each month BuPers makes a new master tape which reflects the over-all manpower picture as drawn by the PAMIs.

Machines Speed Processes

Seavey-Shorvey uses the punch card procedure to help expedite the processing of your transfer. Several types of punch cards, or personnel data series, are presently in use. The data card series consists of four basic cards, each of which contains your name, your service number, the code numbers which identify the reporting distributor and the distributor to whom you are assigned, and the activity from which you are reported. Before you complete a tour of duty (either sea or shore) you are given an opportunity to verify your qualifications for a particular choice of duty, list your duty preferences, and amplify certain other details which may affect your assignment.

The information contained in the data cards is the basis for "making you available" to an EPDO or detailer for transfer when your tour of duty is completed. Although the bookkeeping and filing of data is accomplished chiefly by machines, you are not merely a number or statistic. In the final analysis, action on your transfer or extension, or any other such decision which must be made, is considered personally by an experienced officer who carefully evaluates each item of information provided by machine accounting.

The Shorvey (Shore to Sea)

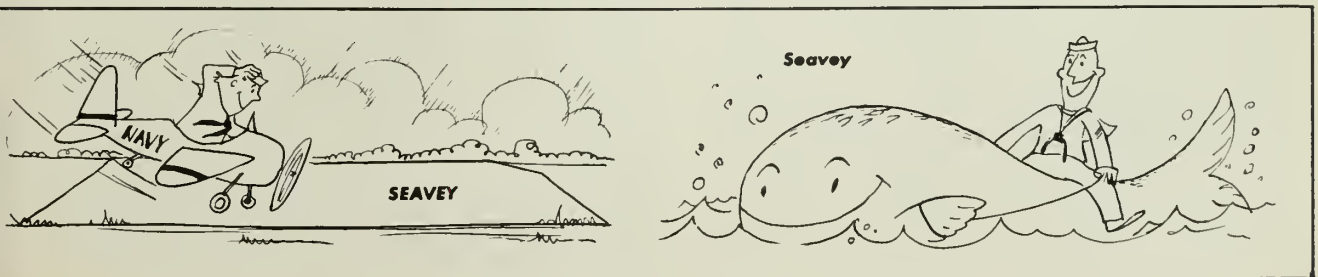
If you're serving on shore duty, the date you will be assigned to sea depends on your rating and its prescribed period of shore duty. The Chief of Naval Personnel maintains a listing of all shore duty personnel and knows exactly when you, as determined by your rating, will be ready for transfer back to sea. The Shorvey process works like this:

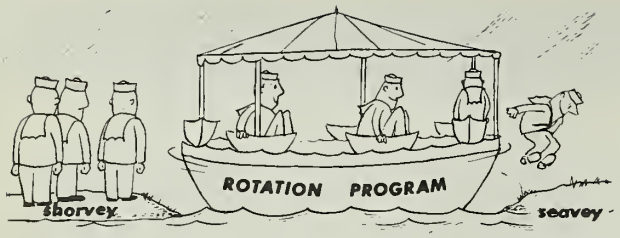
Approximately one year before you complete your shore tour (assuming you are eligible for rotation) the PAMI responsible for your command prepares and mails to your commanding officer a rotation data card. Your CO will see that you are interviewed by a qualified officer or senior petty officer. You fill out an interview form, indicating your choice of sea duty. This information is transposed to the rotation data card, which is then returned to the PAMI. If you do not receive a data card because you fail to meet obligated service requirements for rotation you may, at this point, execute an agreement for additional obligated service. If you do, a rotation data card will be prepared for you and submitted.

Next, PAMI prepares a Shorvey data card from the information on your rotation data card and your individual status card. The Shorvey data is then transmitted to the Chief of Naval Personnel for storage on the master magnetic recording tape until a future decision is made on your assignment.

Normally, four months before your shore tour is completed, a BuPers distribution control officer "makes you available" to a Fleet EPDO or a BuPers detailer, with instructions to transfer you during the month your tour ashore is completed. When BuPers has decided on the broad area to which you will be assigned (Lant, Pac, or Bureau-controlled) it transmits to your commanding officer a copy of the Shorvey 1A card which confirms estimated transfer month, the number of days you may spend on leave in the transfer process, and the sea duty distributional office which is handling your assignment. This "first" notification normally arrives at your command three to four months before the transfer date.

Meanwhile, the EPDO or BuPers detailer, which has also received 1A card information, plus all your rotation data which has been stored in the Bureau on





magnetic tapes, is assigning you a new duty station within his jurisdiction. When your new duty station has been determined, an assignment card or letter is prepared and sent to your CO. This directs him to transfer you to a specific sea activity for duty.

At the same time the assignment card or letter is mailed to your shore duty station a copy is forwarded to your prospective sea duty command. In this way, your new CO will have some advance notice and will be able to determine which job you should take over when you arrive. You usually receive word of your ultimate assignment at least a month before transfer time —or in plenty of time to make preparations for the move. Your CO will issue you a standard transfer order, directing that you be transferred during the specified month, taking your authorized leave on the way. In general, a Shorvey transfer is as simple as that.

The Seavey (Sea to Shore)

The Seavey works closely with Shorvey. Together they form a distribution system which permits planned rotation. This is essential if you are to receive your fair share of both sea and shore duty. The Seavey procedure governs your rotation from sea duty to shore duty.

Seavey provides, basically, assignment to shore billets, that is, replacements for men who are being rotated from shore to sea. Seavey also fills vacancies created by men who leave the Navy at the end of their enlistments or transfer to the Fleet Reserve. The planning of Seavey rotation necessarily becomes more complicated than the Shorvey, and requires different methods of planning and control. But keep this in mind: The Navy has a strong desire to assign you a fair share of shore duty at a location of your choice, while meeting the over-all needs of the service.



Under the Seavey, all sea duty personnel are divided into three segments. Once each year, all ratings in each of the segments are surveyed, and a sea duty commencement cutoff date is established for each rating to determine which men should be rotated to shore duty. (See How the Segments Work, p. 39.)

Once each year (for each of the three segments) a BuPers Notice announces the sea duty commencement date cutoffs for each rating in the segment. PAMI selects those who have been at sea long enough to qualify for rotation, and issues rotation data cards to their commanding officers.

Upon receipt of your rotation data card, you are interviewed by a qualified officer or senior petty officer and are given an opportunity to indicate your next choice of shore or overseas duty.

At this point it is important that you *make your duty preferences as broad as possible.* If you do, the appropriate distributor will have at least one alternate location to assign you if your first choice of duty cannot be satisfied. In addition to the four different duty locations you may request, you should add any information (in block 15 of the rotation data card) you'd like to have the distributor consider. Block 15 might show that you're a qualified lifeguard, for example, or any training or experience not included in your NEC. You may indicate the location of your dependents (if other than homeport) in block 15, or may use it to reveal that a member of your immediate family requires constant medical treatment. The more you include on your rotation data card, the more consideration the de-

These Terms Will Help Chart Course

Here's a listing of some of the terms commonly associated with Seavey-Shorvey:

Sea Duty—Duty performed in: Fleet units, ships, staffs, or squadrons; certain ships and units which operate under the control of district commandants, river commands or the Chief of Naval Air Training, and which have individually been designated as sea duty by the Chief of Naval Personnel; all naval activities based ashore outside the continental United States (Alaska and Hawaii are considered to be outside CONUS); the Fleet Marine Force; Mobile Construction Battalions; and other units and activities which have been designated as sea duty by either the Chief of Naval Personnel, CINCPACFLT or CINCLANTFLT.

Toured Sea Duty—Sea duty performed in non-rotated ships, staffs or units homeported in a foreign country.

Overseas Service—Duty performed ashore at activities outside the continental United States. (Alaska and Hawaii are "overseas.")

Arduous Sea Duty—Duty with ships or units spending considerable periods at sea away from their home ports during local operations and which, when deployed overseas, operate at sea exclusively.

Shore Duty—Duty in staffs, units, activities and harbor craft in the United States.

Normal Tour of Shore Duty—Period of uninterrupted shore duty, as specified for each rating by the Chief of Naval Personnel.

Special Tour—This may apply to "for Duty" tours, and also applies to SN, SA, FN, FA, CN and CP personnel who have served at sea less than 12 months. Normally the number is small. Men in these ratings are assigned ashore for 12 months after boot camp.

EAOS—Expiration of active obligated service. The date your active duty enlistment (including any extensions) expires.

SDCD—Sea duty commencement date.

TCD—Tour completion date. The date your tour ashore will end.

tailer is able to give in assigning you to a duty station of your choice.

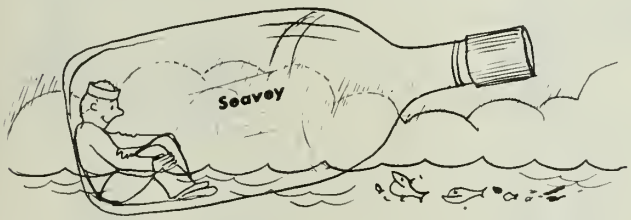
After your rotation data card is completed, it is returned to the PAMI. What you have on the card, together with additional information on file in the PAMI, is transposed into a coded punch card and transmitted to the Chief of Naval Personnel.

BuPers then prepares a listing of all personnel in the segment by rate and order of active duty base date. This determines the priority of assignments to shore duty. As men are ordered to sea duty under the Shorvey, a number of shore billets become vacant, and the distribution control officer selects the senior men of the required ratings on the Seavey who have indicated their preference for the general areas in which the vacancies occur.

If you are selected, a 1A card is mailed to your CO indicating the month you will be transferred, the number of days leave you may take between duty stations, and the naval district within which you are to be assigned.

At the same time the 1A card is mailed to your command, another 1A card, plus all your rotation data, including preferences and any additional information, is forwarded to the EPDO controlling the general area to which you are going. The EPDO then assigns you to a specific duty station under its jurisdiction. (In some cases the Chief of Naval Personnel will retain authority to assign you to a Bureau-controlled billet.)

The EPDO, upon deciding your ultimate assignment, forwards assignment cards to your CO and the command to which you are being ordered. This allows for planning at both ends. Your ship prepares a standard transfer order, and transfers you during the month spe-



cified by the Chief of Naval Personnel on the 1A card.

As indicated above, once you qualify for Seavey on the basis of your sea duty commencement date, just when you will be transferred is determined by how long you have been on active duty in comparison with other men on the Seavey with the same rate and rating, and whether a vacancy occurs in the area of your choice.

In the early stages of the Seavey process, the time you have spent on continuous sea duty is the primary consideration. Once it has been determined that you will be eligible for rotation ashore during a particular Seavey year, your active duty base date becomes important. When actual assignments are made, men in your rating who request the same duty and have been on active duty longer than you will normally be transferred first.

How the Segments Work

Your Seavey transfer is processed during the same time period as the transfers of men of other ratings in the same segment. Once each year each rating in each of the three segments is surveyed to determine the number of vacancies which will occur ashore. Men who have been at sea long enough to qualify for their rating's sea duty commencement cutoff date are placed on the Seavey for transfer ashore to fill these vacancies. The segments consist of the following ratings:

- Segment 1 — BM, QM, SM, RD, SO, TM, GM, GMT, FT, MN, MT, ET, DS, IM, OM, RM, YN, PN, SK, DK, JO, PC, LI, DM.
- Segment 2 — CS, SH, MM, EN, MR, BR, BT, EM, IC, DC, PM, EA, CE, SF, EO, CM, BU, SW, UT, SD, TN.
- Segment 3 — AD, AT, AX, AO, AB, AE, AQ, AM, PR, AG, AK, AZ, PH, PT, HM, DT, DN.

Also included in the segments are designated strikers (pay grade E-3) of the ratings listed. Other non-rated personnel do not come under the Seavey, nor do those mentioned above whose assignments are controlled by means other than Seavey-Shorvey.

Segments Surveyed

To spread the administrative workload of Seavey over a full 12-month period, a yearly schedule is followed for placing each segment into effect. This is done on a continuing basis, with the same action taken on each segment each year at the same time.

Seavey tries to assign you and other men in your segment to shore duty before the following segment comes up for consideration. This is not always possible, due to excesses in certain ratings on a particular Seavey.

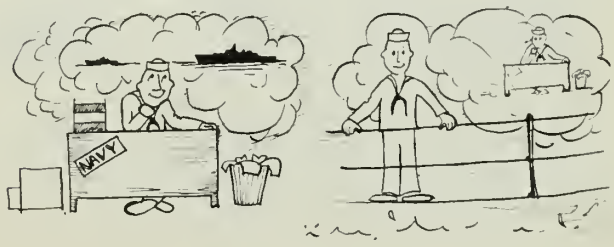
The integrity of the system is upheld, however, in that men in any given Seavey will not be ordered ashore until all the men of the same rating who show up on some previous Seavey have received their orders to shore duty. (The only exception to this procedure may occur when a requirement arises for a certain NEC or qualification. If it does, the man on the list who has the qualification, regardless of where he appears in precedence, will be selected.)

Seavey Segment Schedule

Under the Seavey, three times each year the PAMIs prepare rotation data cards for sea duty personnel whose tours commenced on or before the month established for the rates or ratings included for the particular segment. These cards are forwarded to the com-

	Segment 1	Segment 2	Segment 3
PAMIs start Fleet summary	1 Jul	1 Nov	1 Mar
Fleet summory due in BuPers	1 Aug	1 Dec	1 Apr
BuPers announces sea duty commencement cutoff dates	15 Sep	15 Jon	15 May
Rototion doto cards moiled to seo commonds by PAMI	30 Sep	31 Jon	31 Moy
Commonds complete ond return doto cords to PAMI (no later thon)	15 Nov	15 Mor	15 Jul
Seovey doto cords (from PAMI) due in BuPers no loter thon	18 Jon	18 Moy	18 Sep
BuPers starts issuing orders	1 Feb	1 Jun'	1 Oct

manding officers for completion. When the rotation data cards are returned to the PAMIs, Seavey data



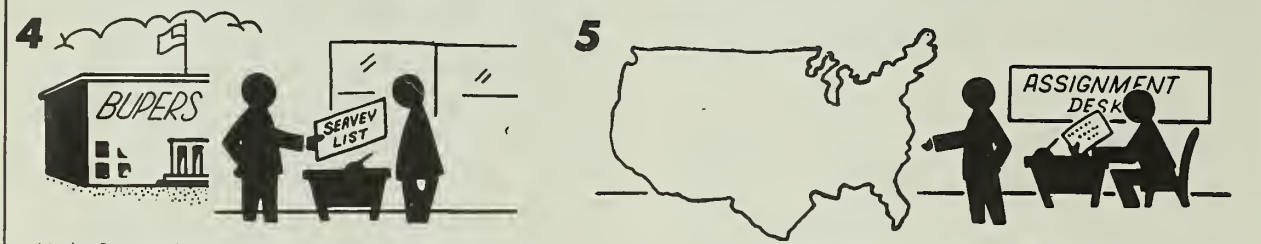
SEAVEY - how you shift from sea to shore



A BuPers Notice each year announces sea duty commencement cutoff dates for each rating. PAMI selects you as eligible for transfer if you have been at sea long enough to meet the cutoff date requirement, and issues a rotation data card to your ship or duty station.

You are then called to the personnel office where, with the personnelman's assistance, you indicate on the rotation data card your shore duty and/or overseas duty preferences. You may also indicate that you desire recruiting duty and/or instructor duty. Your rotation data card is reviewed by your CO and then forwarded, by the fastest means available, to the Fleet PAMI. An entry to this effect is made in your service record.

At the Fleet PAMI the information on your rotation data card is added to other information about you, which the PAMI has on file, and is converted to punched card symbols and codes. Then, by means of transceivers, this information is transmitted electronically to the Bureau.



At the Bureau, the names received from the Fleet PAMIs are compiled into a single Seavey list by rate and length of service. You are then made available to the appropriate EPDO or detailer to fill a shore vacancy when it occurs. The information on your data cards (including choice of duty) is used by the detailer in deciding which shore billet you will fill.

EPDO assigns you to a specific shore station under its jurisdiction, or, if your rating is controlled by the Bureau, the Bureau will select your new station.



The shore duty distributor will, upon assigning you to a specific duty station, forward your deck of data cards to your new duty station and your assignment card to your ship. The data cards will aid your new duty station CO in assigning you to that duty for which you are best qualified. The assignment card your ship receives is an order to your CO directing him to transfer you to a specific duty station ashore.

Upon receipt of your assignment card, your ship will issue standard transfer orders for detachment during a specified month, and you will be directed to report to your shore duty station. Your orders will authorize proceed and travel time, and leave.

cards are prepared for each man and transmitted to the Chief of Naval Personnel.

Your Request for a Specific Billet

While filling out your Seavey rotation data card, remember the following points:

- Keep your areas of preference for shore duty as broad as possible.
- Indicate your special qualifications and training.

If you follow these tips, the distribution officer will have a greater latitude in assigning you — thereby increasing your chances for rapid rotation—and you will be assigned to a billet which requires your special skills. Here's why:

Once you become eligible for a Seavey transfer, and your rotation data card is processed, your name is placed on a list with all other men of your rate and rating who are eligible for the same annual Seavey. For example, if you're a BM1, your name is placed on a list with other BM1s eligible for Seavey transfer during the same segment year.

Your position on the list is determined by your active duty base date—the BM1 who has been in the Navy the longest will be at the top of the list; the BM1 with the least total active service will be at the bottom.

Meanwhile, a number of vacancies for BM1s are occurring ashore. At NAS Jacksonville, Fla., for example, a BM1 on shore duty under the distributional control of EPDOCONUS is scheduled to rotate to sea under the Shorvey. NAS Jax is in the Sixth Naval District, so a shore requirement is generated for 6ND.



Which BM1 on the Seavey list will be picked to fill the Jax billet?

First, the distribution control officer makes sure there

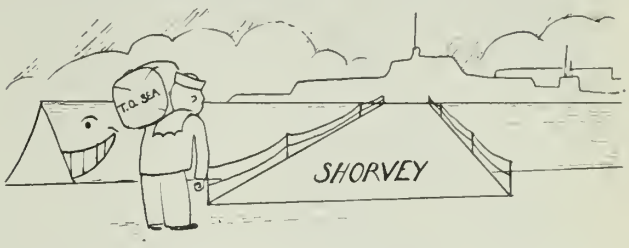
are no BM1s still remaining on a previous year's Seavey. If there are, one of these men will get the Jax assignment. If not, the control officer takes the current BM1 list and, starting at the top, reviews each data file.

If the BM1 at the top of the list had indicated a preference for duty in 6ND, he would receive the assignment. (On the rotation data card this preference is in the form of a three-letter code starting with the letter G or 6ND. The *Enlisted Transfer Manual*, Chapter 25, contains a complete listing of area and city codes.)

The top BM1 could have indicated OOO (anywhere U. S.) or ZOO (anywhere east of the Mississippi), which would also justify his being selected for 6ND. If he had not indicated G–, OOO, or ZOO, the next BM1 is reviewed, and so on down the list until the most senior man who had indicated a preference for 6ND, anywhere U. S., or anywhere east of the Mississippi, is found. He is selected for 6ND and made available to EPDOCONUS.

At EPDOCONUS, the detailer for 6ND assigns the BM1 to an activity where a vacancy exists, giving special consideration to any specific location indicated on the rotation data card. It could be the Jax billet, or another billet, if there's another vacancy.

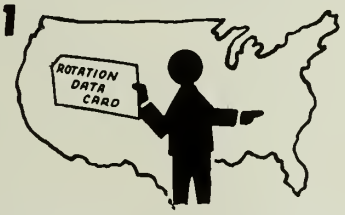
If a shore billet must be filled by a man who possesses



some special qualification, the same means of selection is used, but modified slightly so that only men who possess the required qualifications are considered. (Your special qualifications are indicated by your NEC and the information is noted on blocks 15 and 16 on your rotation data card. You should also use block 15 to list any personal information, not included elsewhere,

SHORVEY - how you shift from shore to sea

1



Approximately 12 months before completing your normal tour of shore duty, PAMICONUS (or PAMILANT or PAC if you are on Fleet shore duty) forwards your rotation data card to your station and instructs your CO to interview you in regard to your choices of sea or overseas duty.

2



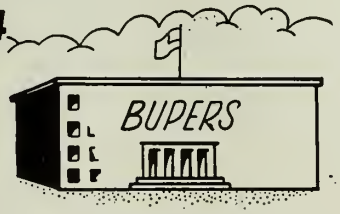
You are called to the personnel office, and, with a personnelman's assistance, you fill out your rotation data card, listing your choices for next sea or overseas duty or school preference Your data card is then returned by fast means to PAMI.

3



The PAMI takes the information from your rotation data card (and other information about you it already has on file) and converts this to punched card codes and symbols. A deck of about four data cards is then punched and transmitted to the Bureau.

4





Using all information from your deck of data cards (which the Bureau assembled into the Shorvey), Bureau assignment officers make you available to either the Atlantic or Pacific Fleet EPDO for further assignment to sea or overseas duty. The information on your assignment card and your data card is then relayed by transceiver to the appropriate Fleet EPDO to assist in assigning you to a Fleet command. This action takes place about four months before you complete your normal tour. Some men on the Shorvey are assigned to schools or to Bureau-controlled billets.

5



The Bureau sends, via EPDOCONUS, a copy of the No. 1A data card to the shore station where you are serving. This card tells the shore distributor he is losing a man from an activity under his jurisdiction and lets you and your CO know the month when you will be transferred. It also tells you the EPDO or detailer to whom you have been made available for further assignment.

6



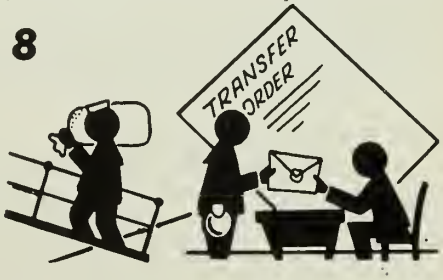
When the EPDO receives your assignment card and deck of data cards from the Bureau (step 4 above), if uses all this information to make a decision as to the ship, Fleet command or overseas activity to which you will be assigned.

7



After determining your next duty assignment, the Fleet EPDO forwards the assignment card to your present shore station. At the same time your deck of data cards is forwarded to your next duty station to assist your next CO in placing you in the right job.

8

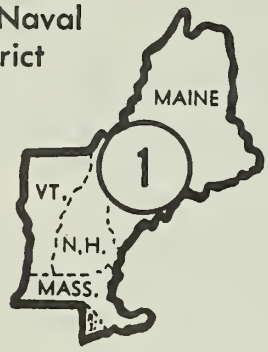


Upon receipt of your assignment card, the shore station will issue standard transfer orders for detachment during a specified month (normally the month in which you complete a tour ashore). You will, then be directed to the assigned sea duty, and your orders will authorize proceed and travel time, as well as leave.

Are You Getting Ready to

If you're hoping to drop anchor in the continental U. S., here's a roundup of naval activities in each District and River Command. Anchors indicate the presence of a specified type of unit. Note that recruiting substations or

1st Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Boston, Mass.	⚓				⚓	⚓	⚓										⚓	⚓	⚓		⚓	⚓
Brunswick, Me.			⚓																			
Buzzards Bay, Mass.		⚓																				
Cambridge, Mass.		⚓																				
Castine, Me.		⚓																				
Chelsea, Mass.											⚓											
Cutler, Me.														⚓								
Davisville, R. I.								⚓														
Hanover, N. H.		⚓																				
Medford, Mass.		⚓																				
Newport, R. I.					⚓	⚓	⚓			⚓	⚓			⚓	⚓	⚓			⚓			⚓
Pittsfield, Mass.							⚓									⚓						
Portsmouth, N. H.						⚓	⚓			⚓	⚓			⚓	⚓	⚓			⚓			⚓
Providence, R. I.		⚓					⚓															
Quonset Point, R. I.			⚓							⚓												
South Weymouth, Mass.			⚓																			
Winter Harbor, Me.														⚓					⚓			
Worcester, Mass.		⚓					⚓															

*Naval Reserve Training Centers are also located in the following cities: MASSACHUSETTS: Brockton, Fall River, Lawrence, Lowell, Lynn, New Bedford, Quincy, Salem, Springfield. MAINE: Augusta, Bangor, Portland. NEW HAMPSHIRE: Manchester. RHODE ISLAND: Pawtucket, Woonsocket. VERMONT: Burlington.

which you wish the distributor to consider.)

Rate Determines Length of Shore Tour

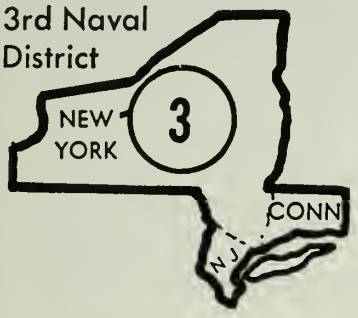
If you're ordered to a normal tour of shore duty under Seavey, it means you will spend anywhere from 24 to 54 months, depending on your rate, on continuous shore duty. Present normal tours are as follows:

• **24 MONTHS—** BM1, 2, 3, BMSN; QM1, 2, 3, QMSN; SM1, 2, 3, SMSN; RD1, 2, 3, RDSN; TM1, 2, 3, TMSN; GMT3, GMTSN; MN3, MNSN; GMC, 1, 2, 3, GMSN; FTC, 1, 2, 3, FTSN; MT3, MTSN; ET3, ETSN; IM1, 2, 3, IMSN; OM1, 2, 3, OMSN; RM1, 2, 3, RMSN; SK1, 2, 3, SKSN; DK2, 3, DKSN; CS1, 2, 3, CSSN; SH1, 2, 3, SHSN; LIC, 1, 2, 3, LISN; MMC, 1, 2, 3, MMFN; EN1, 2, 3, ENFN; MR1, 2, 3, MRFN; BR1; BTC, 1, 2, 3, BTFN; EMC, 1, 2, 3, EMFN; IC1, 2, 3, ICFN; DC1, 2, 3, DCFN; PM1, 2, 3, PMFN; ML1, 2, 3, MLFN; SFC, 1, 2, 3, SFFN; EA1, 2, 3, EACN; CE1, 2, 3, CECN; CM3, CMCN; BU1, 2, 3, BUCN; SW1, 2, 3, SWCN; UT1, 2, 3, UTCN; AT3, ATAN; AX3, AXAN, AO2, 3, AOAN; AB2, 3, ABAN; AGAN; PH3, PHAN; HN; DN; SD1, 2, 3, TN, SO1, 2, 3, SOSN.

• **30 MONTHS—**BMC; SMC; RDC; SOC; TMC; ET1, 2; IMC; OMC; RMC; SKC; CSC; SHC; ENC; BRC- ICC- PMC-

Drop Anchor in CONUS?

branches are too numerous to list. Therefore, only the main stations in each district are indicated. Remember that the number of billets and the ratings eligible for these billets vary at each location. Take this into consideration.



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Albony, N. Y.	⚓						⚓															
Boyonne, N. J.					⚓																	⚓
Brooklyn, N. Y.			⚓	⚓	⚓	⚓	⚓				⚓						⚓	⚓				⚓
Buffolo, N. Y.	⚓						⚓															
Eorle, N. J.																⚓						
Fort Monmouth, N. J.																						⚓
Ithoco, N. Y.		⚓					⚓															
Kings Point, N. Y.		⚓																				
Long Islond, N. Y.											⚓											
New Hoven, Conn.		⚓					⚓															
New London, Conn.					⚓	⚓	⚓			⚓	⚓											⚓
New York City, N. Y.	⚓	⚓			⚓					⚓									⚓		⚓	⚓
Rochester, N. Y.		⚓					⚓															
Schenectady, N. Y.										⚓												⚓
Scotio, N. Y.							⚓															⚓
Troy, N. Y.		⚓					⚓															
Windsor, Conn.										⚓												⚓

*Novol Reserve Troining Centers ore olso locoted in the following cities: CONNECTICUT: Cromwell, Hortford, Bridgeport, Stomford, Woterbury. NEW JERSEY: Clifton, Elizobeth, Freeport, Jersey City, Port Nework, Perth Amboy, Red Bonk, Summit. NEW YORK: Auburn, Binghomton, Bronx, Dunkirk, Elmiro, Glens Falls, Huntington, Jomestcwn, Liverpool, Middletown, Newburgh, New Rochelle, Ogdensburg, Oswego, Poughkeepsie, Syrocuse, Tompkinsville, Utico, Wotertown, Whitestone, Yonkers, Youngstown.

MLC; EAC; CEC; EOC, 1, 2, 3, EOCN; CMC, 1, 2; BUC; SWC; UTC; AT2; AX2; AB1; AE3, AEAN; AG3; SDC.

• **36 MONTHS**—QMC; GMTC, 1, 2; MN2; ETC; DSC, 1, 2, 3, DSSN; YN3, YNSN; PN3, PNSN; DK1; JO3, JOSN; DM3, DMSN; MRC; DCC; ATC, 1; AXC, 1; AOC, 1; ABC; AEC, 1, 2; PR1, 2, 3, PRAN; AG1, 2; AK1, 2, 3, AKAN; PHC, 1, 2; PTC, 1, 2, 3, PTSN; HM3; BT2, 3, AQC, 1, 2;

• **42 MONTHS**—MNC, 1; MTC, 1, 2; DKC; ADRC, 1, 2, 3, ADRAN; ADJ2, 3, ADJAN; AEC, 1; AQCM, AQCS; AMC, 1, 2, 3, AMAN; PRC; AKC; HM2; YNC, 1, 2.

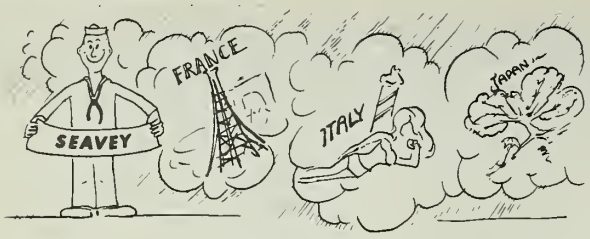
• **48 MONTHS**—PN1, 2; JO1, 2; ADCM, ADCS; ADJC, 1; HMC, 1; DT1.

• **54 MONTHS**—PNC; JOC; DMC, 1, 2; DTC.

Unless otherwise specified, tour lengths for men in pay grades E-8 and E-9 are the same as those listed for corresponding E-7 tours.

Shore Duty Completion Date

Your shore tour completion date is assigned within four months after you report for a normal tour ashore. If you do not have sufficient obligated active service to complete a normal shore tour as specified for your



rating and pay grade, you may use the four months to evaluate your personal situation and make a decision.

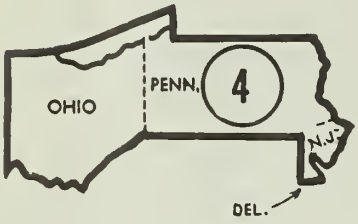
You may decide to allow your enlistment to expire during your shore tour, or you may elect to extend or reenlist, as necessary, to allow for completion of a normal shore tour, with an additional 12 months' obligated service for further assignment back at sea.

There is sound reasoning behind the additional service requirement. To facilitate planning, the Navy must know your intentions when you first report ashore (or within four months). In this way, personnel planners know exactly how long you can be counted on to fill a certain shore billet, and can further predict when a relief is going to be needed for you. What's more, when the exact requirements ashore are known, a truly valid sea duty cutoff date can be established for Seavey, providing only the number of men required for the year.

With this in mind, here's how your active obligated service affects your tour ashore.

• If you desire a normal tour and your EAOS (see definitions, page 38) is less than the established normal tour for your rating, you have four months in which to execute an agreement to extend your enlistment. If you don't extend you will be discharged at your shore

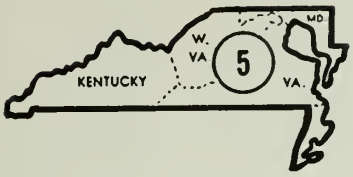
4th Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Camden, N. J.							⚓											⚓				
Cape May, N. J.																				⚓		
Cincinnati, Ohio	⚓			⚓			⚓															
Cleveland, Ohio	⚓			⚓	⚓		⚓															
Columbus, Ohio	⚓						⚓															
Johnsville, Pa.			⚓																			
Lakehurst, N. J.			⚓							⚓												
Mechanicsburg, Pa.					⚓											⚓						
Oxford, Pa.		⚓																				
Philadelphia, Pa.	⚓	⚓	⚓	⚓	⚓	⚓	⚓			⚓	⚓						⚓	⚓	⚓			
Pine Beach, N. J.										⚓												
Pittsburgh, Pa.	⚓						⚓															
Princeton, N. J.		⚓																				
University Park, Pa.		⚓																				
Villanova, Pa.		⚓																				
Willow Grove, Pa.			⚓																			
York, Pa.							⚓										⚓					

*Naval Reserve Training Centers are also located in the following cities: DELAWARE: Wilmington. NEW JERSEY: Atlantic City, Newark. Trenton. OHIO: Akron, Canton, Chillicothe, Dayton, Hamilton, Lima, Lorain, Mansfield, Portsmouth, Steubenville, Toledo, Warren, Youngstown, Zanesville. PENNSYLVANIA: Allentown, Altoona, Bethlehem, Erie, Folsom, Harrisburg, Hazelton, Johnstown, Lancaster, McKeesport, Reading, Scranton, Wilkes Barre, Williamsport.

5th Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Ashland, Ky.	⚓			⚓			⚓															
Bainbridge, Md.					⚓	⚓	⚓			⚓		⚓										⚓
Baltimare, Md.	⚓						⚓														⚓	
Cape Hatteras, N. C.																				⚓		
Charlottesville, Va.		⚓																				
Dam Neck, Va.										⚓						⚓						
Driver, Va.														⚓								
Camp Lejeune, N. C.			⚓								⚓											
Little Creek, Va.													⚓									
Louisville, Ky.	⚓	⚓					⚓															
Newport News, Va.							⚓															⚓
Narfolk, Va.			⚓	⚓	⚓	⚓	⚓			⚓	⚓	⚓		⚓	⚓			⚓	⚓		⚓	
Northwest, Va.														⚓								
Oceana, Va.			⚓																			
Portsmouth, Va.							⚓			⚓	⚓					⚓	⚓	⚓				
Richmond, Va.	⚓						⚓									⚓						
Suitland, Md.																					⚓	
Virginia Beach, Va.			⚓							⚓												
Yorktown, Va.																	⚓					

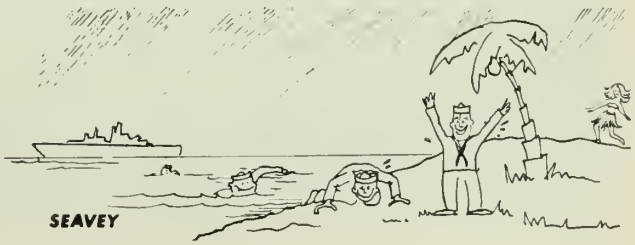
*Naval Reserve Training Centers are also located in the following cities: KENTUCKY: Covingtan, Lexingtan, Owensboro, Paducah. MARYLAND: Cumberland. NORTH CAROLINA: Washingtan. VIRGINIA: Fisherville, Lynchburg, Parkersburg. WEST VIRGINIA: Sauth Charleston, Huntington, Wheeling.

station when your enlistment expires or, if you later decide to extend or reenlist, you will be ordered to sea immediately after completing the shore tour established in your case.

If you intend to make the Navy a career anyway, the chances of pulling the sea duty of your choice are greater when you agree to extend within four months and complete the normal tour. If you wait until your enlistment expires, it is usually too late to assign you a sea billet of your choice, simply because the detailer has no time for planning. Thus, you become one of the "immediate availables" used to plug gaps and fill urgent requirements.

• If your EAOS occurs from one to six months after a normal shore tour, your tour ashore would be extended to coincide with your EAOS.

• If your EAOS falls from seven to 11 months after a normal shore tour, you are given the opportunity to extend your enlistment to provide at least 12 months' obligated service upon completion of a normal tour. If you do not extend to provide at least 12 months' obligated service upon completion of a normal tour,



SEAVEY-SHORVEY



6th Naval District

	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Athens, Ga.							⚓			⚓												
Atlanta, Ga.	⚓	⚓	⚓		⚓		⚓															
Auburn, Ala.		⚓																				
Beaufart, S. C.											⚓											
Birmingham, Ala.	⚓			⚓			⚓															
Brunswick, Ga.			⚓							⚓												
Cecil Field, Fla.			⚓																			
Chapel Hill, N. C.		⚓																				
Charlestan, S. C.				⚓	⚓		⚓			⚓	⚓				⚓	⚓	⚓	⚓	⚓			⚓
Cocoa Beach/Cape Kennedy, Fla.																⚓						
Columbia, S. C.	⚓	⚓					⚓															
Durham, N. C.		⚓					⚓															
Ft. Lauderdale, Fla.							⚓									⚓						
Foley, Ala.			⚓																			
Glynca, Ga.			⚓		⚓					⚓												
Jacksanville, Fla.	⚓		⚓		⚓		⚓			⚓	⚓								⚓			
Key West, Fla.			⚓			⚓	⚓			⚓	⚓					⚓			⚓			
Macon, Ga.	⚓						⚓									⚓						
Mayport, Fla.						⚓										⚓						
Memphis, Tenn.			⚓		⚓		⚓			⚓	⚓											
Meridian, Miss.			⚓				⚓															
Miltan, Fla.			⚓																			
Nashville, Tenn.	⚓	⚓					⚓															
Orlanda, Fla.							⚓															
Panama City, Fla.					⚓											⚓						
Patrick AFB, Fla.																⚓						
Pensacola, Fla.			⚓		⚓		⚓			⚓	⚓			⚓								⚓
Raleigh, N. C.	⚓						⚓															
Sanford, Fla.			⚓																			
University, Miss.		⚓																				

*Naval Reserve Training Centers are also located in: ALABAMA: Gadsden, Huntsville, Mobile, Mantgomery, Sheffield, Tuscalaasa. FLORIDA: Daytona Beach, Gainesville, Miami, Riviera Beach, St. Petersburg, Tampa, Tallahassee. GEORGIA: Augusta, Calumbus, Savannah. MISSISSIPPI: Greenville: Gulfport, Jacksan, Laurel, McCamb, Vicksburg. NORTH CAROLINA: Asheville, Charlotte, Greensbara, Wilmingtan, Winston-Salem. SO. CAROLINA: Florence, Geargetown, Greenville, Greenwood, Spartanburg. TENN.: Chattanaaga, Jacksan, Kingspart, Knoxville.



your rotation date is moved back and you are "short toured" so that 12 months will remain for rotation back to sea.

Here's a closer look at each election:

• Your enlistment is to expire before you could complete a normal shore tour. In this case you must make up your mind, within four months after first reporting ashore, whether or not you wish to extend to complete the full tour. If you elect not to extend, your shore tour completion date will be established to coincide with your expiration of enlistment. For example:

You report for shore duty in May '64

Your EAOS expiration date is Sep '65

A normal 36-month tour would end in May '67

You elect not to extend or acquire further obligated service

A shore tour completion date of Sep '65 is assigned

If, in this case, you should elect to reenlist or extend after the four-month deciding period, your TCD would not change and you would be made available for rotation at the end of your shortened shore tour.

• However, in the event you decide to obligate for further service during the four-month period allotted, your situation would be like this:

You report for shore duty in May '64

Your EAOS is Sep '65

A normal 36-month tour would end in May '67

You agree to extend for three more years

New EAOS is recorded as Sep '68

Your shore tour completion date is May '67—you have a normal tour.

• Your EAOS is less than six months beyond com-

8th Naval District

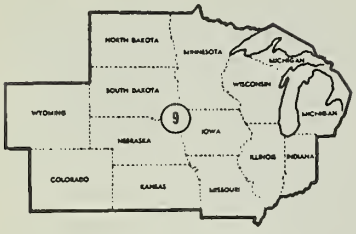


	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Albuquerque, N. M.	⚓	⚓		⚓			⚓									⚓						⚓
Austin, Tex.		⚓					⚓															
Beeville, Tex.			⚓																			
Camden, Ark.							⚓									⚓						
Corpus Christi, Tex.			⚓				⚓			⚓	⚓											
Dallas, Tex.	⚓		⚓				⚓														⚓	
Galveston, Tex.							⚓														⚓	
Houston, Tex.	⚓	⚓					⚓															
Kingsville, Tex.			⚓				⚓															
Little Rock, Ark.	⚓						⚓															
McAlester, Okla.							⚓									⚓						
New Iberia, La.			⚓																			
New Orleans, La.	⚓	⚓	⚓		⚓	⚓	⚓											⚓	⚓		⚓	
Norman, Okla.		⚓					⚓			⚓												
Oklahoma City, Okla.	⚓						⚓															
White Sands, N. M.																⚓						⚓

*Naval Reserve Training Centers are also located in the following cities: ARKANSAS: Eureka Springs, Fayetteville, Fort Smith, Helena. LOUISIANA: Alexandria, Baton Rouge, Houma, Lafayette, Lake Charles, Monroe, Ruston, Shreveport. NEW MEXICO: Carlsbad, Santa Fe. OKLAHOMA: Chickasha, Enid, Stillwater, Tulsa. TEXAS: Abilene, Amarillo, Beaumont, Bellville, El Paso, Fort Worth, Harlingen, Laredo, Lubbock, McAllen, Nacogdoches, Odessa, Orange, Paris, Port Arthur, San Angelo, San Antonio, Sherman, Tyler, Victoria, Waco, Wichita Falls.

SEAVEY-SHORVEY

9th Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Ames, Iowa		⚓																				
Ann Arbor, Mich.		⚓																				
Boulder, Colo.		⚓					⚓															
Chicago, Great Lakes, Ill.	⚓	⚓			⚓	⚓	⚓		⚓	⚓	⚓							⚓	⚓		⚓	⚓
Colorado Springs, Colo.							⚓								⚓							
Columbia, Mo.		⚓																				
Crane, Ind.																			⚓			
Denver, Colo.	⚓						⚓			⚓												
Des Moines, Iowa	⚓						⚓															
Detroit, Mich.	⚓						⚓															
Evonston, Ill.		⚓					⚓															
Forrest Park, Ill.							⚓									⚓						
Glenview, Ill.			⚓				⚓			⚓												
Grosse Ile, Mich.			⚓																			
Hastings, Nebr.																⚓						
Indianapolis, Ind.	⚓						⚓													⚓		
Kansas City, Mo.	⚓						⚓															
Lafayette, Ind.		⚓																				
Loke Meod, Nev.																						⚓
Lawrence, Kan.		⚓																				
Lincoln, Nebr.		⚓					⚓															
Madison, Wis.		⚓					⚓															
Milwaukee, Wis.	⚓	⚓					⚓															
Minneopolis, Minn.	⚓	⚓	⚓				⚓															
Olothe, Kon.			⚓							⚓												
Omaha, Nebr.	⚓						⚓															⚓
St. Louis, Mo.	⚓						⚓															
South Bend, Ind.		⚓					⚓															
Springfield, Ill.		⚓					⚓															
Urbana, Ill.		⚓																				
West Lafayette, Ind.		⚓																				

*Naval Reserve Training Centers are also located in the following cities: COLORADO: Pueblo. ILLINOIS: Aurora, Danville, Decatur, Joliet, Maline, Pearia, Quincy, Rockford. INDIANA: Anderson, Evansville, Fort Wayne, Gary, Michigan City, Muncie, Terre Haute. IOWA: Burlington, Cedar Rapids, Davenport, Dubuque, Sioux City, Waterloo. KANSAS: Arkansas City, Hutchinson, Topeka, Wichita. MICHIGAN: Alpena, Battle Creek, Bay City, Bentan Harbar, Cadillac, Dearborn, Flint, Grand Rapids, Hancock, Jacksan, Kalamazaa, Lansing, Muskegan, Pantiac, Port Huran, Saginaw. MINNESOTA: Duluth, St. Paul. MISSOURI: Cape Girardeau, Hannibal, Joplin, Springfield, St. Joseph. NORTH DAKOTA: Farga. SOUTH DAKOTA: Siaux Falls. WISCONSIN: Green Bay, LaCrasse, Oshkash, Racine, Shebaygan. WYOMING: Cheyenne, Midwest.

pletion of a normal shore tour. Here, if you do not elect to extend, a tour completion date will be assigned to coincide with your EAOS. (This is done to avoid sending "short timers" back to sea.) For example:

You report ashore in May '64
Your EAOS is Sep '67
A normal tour would end in May '67
Your TCD is Sep '67, the same as your EAOS

• Your EAOS will fall seven to 11 months after a normal shore tour:

You report ashore in May '64
Your EAOS is Dec '67
You agree to obligate for an additional 12 months.
New EAOS is recorded as Dec '68
Your shore tour completion date is May '67—you have a normal tour

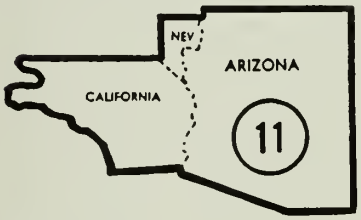
• If you elect not to extend your service, and you have an EAOS falling seven to 11 months after a normal tour would be completed, your tour ashore is reduced to permit rotation back to sea:

You report ashore in May '64
Your EAOS is Dec '67

A tour completion date of Dec '66 is recorded—less than a normal tour.

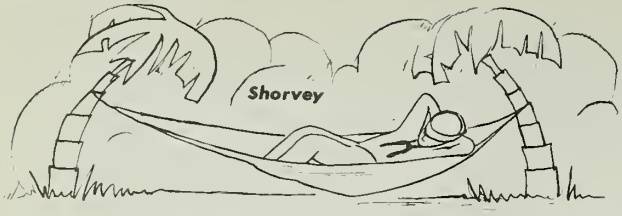
In any case, if you are already serving on an extension and are prevented by law from extending or reenlisting,

11th Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Inteligence Office	Naval Facility	Hydrographic Office	Other
Barstow, Calif.					⚓																	
Camp Pendletan, Calif.					⚓					⚓	⚓											
China Lake, Calif.			⚓													⚓						
Carona, Calif.																⚓						
Coranado, Calif.					⚓								⚓		⚓							
El Centro, Calif.																						⚓
Imperial Beach, Calif.			⚓											⚓								
Litchfield Park, Ariz.			⚓																			
Long Beach, Calif.			⚓			⚓	⚓	⚓			⚓						⚓	⚓	⚓			
Los Angeles, Calif.	⚓	⚓		⚓			⚓				⚓			⚓					⚓			
Miramar, Calif.			⚓																			
Phaenix, Ariz.			⚓				⚓															
Point Mugu, Calif.			⚓													⚓			⚓			
Port Hueneme, Calif.					⚓			⚓		⚓						⚓						
San Diega, Calif.			⚓		⚓	⚓	⚓		⚓	⚓	⚓	⚓	⚓	⚓	⚓				⚓			⚓
Santa Ana, Calif.			⚓				⚓															
Wilmingtan, Calif.							⚓														⚓	

*Naval Reserve Training Centers are alsa located in the following cities: ARIZONA: Douglas, Flagstaff, Tucson. CALIFORNIA: Bakersfield, Camptan, Hawtharne, Huntington Park, Lancaster, Pasadena, Pomano, San Bernardino, San Clemente, San Pedra, Santa Barbara, Santa Monica. NEVADA: Las Vegas.



you may acquire further obligated service by signing a statement indicating your intent to reenlist (upon expiration of your extension) for the purpose of completing a normal shore tour. This will allow further obligation of service without forcing you to reenlist early (which could mean a loss of money).

Whenever you acquire additional obligated service after the regular submission of Shorvey data cards, your command should send a speedletter containing complete rotation data to BuPers, with a copy to the appropriate PAMI. In this way your duty preferences will be considered in the reassignment.

Shorvey Rotation Schedule

Under the normal Shorvey rotation plan data cards are prepared for all shore duty personnel for transfer back to sea, in accordance with the following schedule:

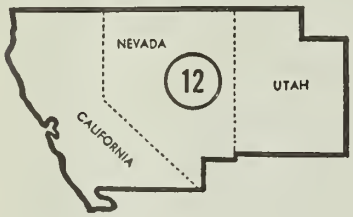
Cards Prepared By PAMI	Forwarded to Commond for Completion by	For Men Whose Shore Tours Expire 11 to 13 Mos Later
FEB	25 FEB	JAN, FEB, MAR
MAY	25 MAY	APR, MAY, JUN
AUG	25 AUG	JUL, AUG, SEP
NOV	25 NOV	OCT, NOV, DEC

Sea/Shore Extensions

If, for some reason or other, you don't wish to be transferred, what are the chances you will be granted an extension at your present command?

• If you're on shore duty, an extension of your tour will be considered by the Chief of Naval Personnel *only* on the basis of urgent manning or humanitarian problems. When you receive your Shorvey rotation data

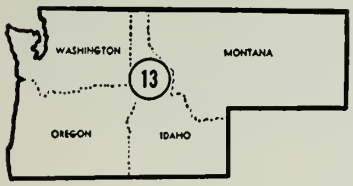
12th Naval District



	Recruiting Station	NROTC	NAS/Novol Air Activity	Receiving Station	Supply/Disbursing Activity	Novol Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Novol Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Novol Facility	Hydrographic Office	Other
Alameda, Calif.			⚓				⚓			⚓												
Berkeley, Colif.		⚓									⚓											
Camp Roberts, Calif.																						⚓
Concord, Calif.															⚓							
Fallon, Nev.			⚓																			
Hawthorne, Nev.																⚓						
Lemoore, Calif.			⚓																			
Moffett Field, Calif.			⚓																			
Monterey, Calif.			⚓				⚓			⚓												
Oakland, Calif.					⚓					⚓	⚓											
Ogden, Utah					⚓		⚓															
Salt Lake City, Utah		⚓					⚓										⚓					
San Francisco, Calif.	⚓			⚓	⚓	⚓	⚓			⚓	⚓						⚓	⚓			⚓	⚓
Sonoma, Calif.														⚓								
Stockton, Calif.					⚓		⚓							⚓								⚓
Stanford, Calif.		⚓																				
Vallejo, Calif.		⚓			⚓		⚓			⚓	⚓			⚓			⚓	⚓				

*Naval Reserve Training Centers are also located in the following cities: CALIFORNIA: Eureka, Fresno, Sacramento, San Mateo, Santa Cruz, Tulare, Ukiah. NEVADA: Reno.

13th Naval District



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Astoria, Ore.																						⚓
Bremerton, Wash.					⚓		⚓			⚓	⚓					⚓	⚓	⚓				
Butte, Mont.	⚓						⚓															
Corvallis, Ore.		⚓					⚓															
Idaho Falls, Idaho							⚓			⚓						⚓						
Jim Creek, Wash.														⚓								
Keyport, Wash.						⚓										⚓						
Marietta, Wash.																			⚓			
Moscow, Idaho		⚓																				
Oak Harbor, Wash.			⚓																			
Oso, Wash.														⚓								
Portland, Ore.	⚓						⚓															
Seattle, Wash.	⚓	⚓	⚓		⚓		⚓					⚓		⚓				⚓	⚓		⚓	
Whidbey Island, Wash.			⚓																			

*Naval Reserve Training Centers are also located in the following cities: IDAHO: Boise, Pocatello. MONTANA: Billings, Great Falls, Miles City, Missoula. OREGON: Eugene, Grant's Pass, Klamath Falls, Medford, North Bend, Roseburg, Salem. WASHINGTON: Bellingham, Clarkston, Everett, Longview, Pasco, Spokane, Tacoma, Walla Walla, Wenatchee, Yakima.

card you may request that your shore tour be extended for a specified period. You must fully justify the request, and your rotation data card must be completed and returned to the PAMI on schedule.

If your extension is granted, your CO will be advised by means of the Enlisted Distribution and Verification Report (1080-14). If an extension is not granted, you will be notified by letter.

Conversely, you would not usually be returned to sea duty until you have completed a normal shore tour for your rating. If, for some reason, you are sent to sea before your normal tour of shore duty has been completed, the transfer must be fully justified by your CO and approved by the Chief of Naval Personnel. Even if your shore activity should be disestablished, every effort would be made to reassign you to another shore station for completion of the normal tour.

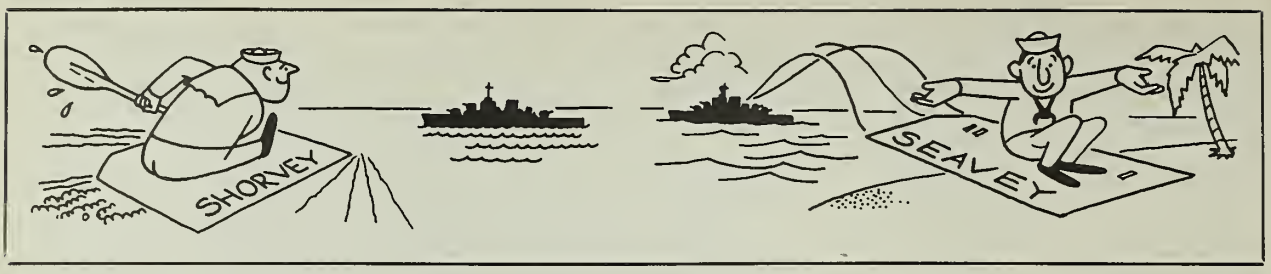
• If you wish to extend your tour at sea, your request should be based on a sincere desire for arduous sea duty, or on a personal hardship. Requests based on personal hardships must be substantiated by affidavits.

You may indicate your desire to remain at sea when you complete your rotation data card. If approved, your extension will be effected by BuPers during the first months of your Seavey segment year, based on the "needs of the service."

• From time to time it becomes necessary to extend involuntarily the sea tours of some men. Examples of involuntary sea extensions are:

If you are serving on overseas shore duty—When you become eligible for rotation to shore duty in the U. S. you must be moved in the month your tour of overseas duty is completed. Since there are not always enough U. S. shore vacancies to accommodate all the men who complete overseas duty, it may become necessary to return your name to the Fleet EPDO for further assign-





ment to sea duty. Your sea tour is extended 14 months in the interest of Fleet stability.

You do not have sufficient obligated service—If you are serving on overseas shore duty and do not have sufficient obligated service for rotation ashore (the minimum is 16 months) you may be extended at sea for 14 months or until your EAOS (if earlier).

EAOS—If you elect to leave your sea duty command when your hitch has been completed and then reenlist at a receiving or recruiting station, you will be temporarily removed from Seavey and extended on sea duty until the next annual submission of rotation data cards for your segment.

New Ship—If you are transferred to a new construction ship, your sea tour is extended to permit a minimum of one year on board after date of commissioning. This is necessary to provide stability for pre-commissioning details and initial operations.

Key Man—If you are a key man in your ship's organization and your transfer without relief would significantly affect your unit's operational capability, your commanding officer or the appropriate EPDO may request an "operational hold" for any period up to six months. The Chief of Naval Personnel will approve an "OpHold" only if an urgent need for your services is substantiated.

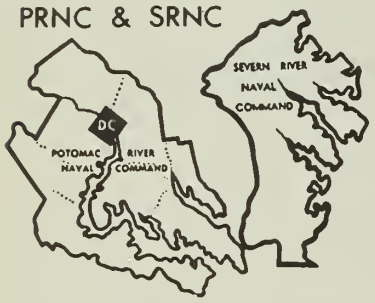
Verification of Vey Status

Thanks to the capabilities of today's electronic computers and data processing machines, the Chief of Naval Personnel is able to keep the entire Fleet advised of the rotation status of each Navyman. For example, if you are not being considered for reassignment under Seavey,



you may find out why simply by checking the Enlisted Distribution and Verification Report (NavPers 1080-14), which is sent to your command each month.

It is possible, therefore, to check your status each month—right at your own command. You may correct any situation which might prevent your rotation, such as insufficient obligated service, or an error contained



	Recruiting Station	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	NRTC*/Elec. Facility	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Annapolis, Md.						⚓					⚓			⚓								⚓
Bethesda, Md.										⚓	⚓											
Cheltenham, Md.														⚓								
Dahlgren, Va.																⚓						⚓
Indian Head, Md.										⚓						⚓						
Patuxent River, Md.			⚓																			
Quantico, Va.			⚓								⚓											
Washington, D. C.	⚓		⚓		⚓	⚓	⚓				⚓	⚓		⚓		⚓		⚓	⚓		⚓	⚓
White Oak, Md.							⚓									⚓						

Do You Know Your Rotation Data Codes?

Code	What it Means
C1, L1, or P1	Your rotation data card has been mailed to your command by PAMI (CONUS, LANT or PAC, as appropriate).
C2, L2, or P2	PAMI has forwarded rotation data card information to BuPers. BuPers will process this information and furnish the PAMI with additional rotation data at some later date.
C3, L3, or P3	Your name has been sent to BuPers as eligible for Seavey/Shorvey. However, no information regarding your duty preferences was furnished PAMI. Therefore, you will be recorded by BuPers "without duty preferences" until your preferences are submitted by speedletter.
2*	You are eligible for assignment, but will become ineligible in less than 90 days because of insufficient obligated service. (This code applies only to Seavey.)
20	You are eligible for assignment, but orders have not yet been issued.
21	Not eligible for assignment because of insufficient obligated service.
22	Your sea duty commencement date is blank, or you are ineligible to be included in the current Seavey segment. Verify your sea duty commencement date on the 1080-14. If it's in error, act in accordance with paragraph 3.32 of the TRANSFER MANUAL.
23	You are not being considered for orders this month because of tour completion date factor. Includes those whose shore/overseas tours have been extended.
25	You are not being considered for orders this month because you are in a transient or temporary duty status.
26	You are not being considered for orders this month because the sea/shore code of the activity to which you're assigned has been changed and is being verified by BuPers. A new code will be assigned upon completion of this verification.
27	Your assignment is being held in abeyance because of a sea tour extension.
28	You are not being considered for orders this month because you are assigned to one of the special billets outlined in paragraph 24.41 of the TRANSFER MANUAL.
29	You are ineligible for orders because you're in a status not covered by Seavey/Shorvey (e.g., MA, MU, TD, Wave).
30	Assignment is either pending a decision by EPDO, or a transfer directive has been issued.
92	You've been removed from Seavey/Shorvey because the sea/shore code of your activity has been changed, making you ineligible.
93	Removed from Seavey/Shorvey because your EDA at your new duty station has passed.
94	Removed from Seavey/Shorvey because you've reported to your new activity.
95	Removed from Seavey/Shorvey as a result of information received at BuPers.
97	Removed from Seavey/Shorvey because your name or service number on new submissions does not match BuPers records. (BuPers will take action to restore you on Seavey/Shorvey.)
98	Removed from Seavey/Shorvey for some unknown reason. (BuPers is trying to find out why.)
99	Removed from Seavey/Shorvey because of PAMI change.

in your processing data.

Here's a roundup of the numerical codes used in the 1080-14, and what they mean with regard to your Seavey or Shorvey status:

Change of Duty Preferences

From time to time you may wish to change your Seavey-Shorvey duty choices. Since there's a considerable time lag between your first duty preference submission and your actual assignment, you may submit changes once the original duty preferences have been processed. Your commanding officer should forward a complete list of your new choices to the Chief of Naval Personnel. Your new wishes will be considered by the appropriate detailer, provided your assignment orders have not already been issued.

The Enlisted Transfer Manual

The *Enlisted Transfer Manual* (NavPers 15909-A) is the official guide to the Seavey-Shorvey program. The *TransMan* explains in detail many of the points covered in this discussion. Chapter 1 describes the Navy enlisted distribution system, manpower requirements, and the need for an effective rotation program. Chapter 3 is all about Seavey, and Chapter 7 describes the workings of Shorvey.

Other chapters of the *Manual* concentrate on assignments to recruiting duty, instructor duty, overseas duty, service schools, and distribution of enlisted women. Chapters 24 and 25 define the numbers and letter codes of Seavey-Shorvey punch cards.

One final tip: If you have any questions concerning your standing on Seavey-Shorvey, or would like to apply for a special transfer or assignment, contact someone in your personnel office who is an expert on the *TransMan*, then weigh the suggestions contained in this report. Remember that Seavey-Shorvey benefits both you and the Navy. Whenever possible, you receive duty of your choice. The program is aimed to give you a fair share of sea and shore duty in billets in which you are qualified.



Chart Shows Billets Ashore and

These tables show distribution of billets ashore and afloat, according to rate and rating. Ratings not listed—CT, MA, MU, TD, AG (E-7, 8, 9), AC—and aviation pilots, TAR personnel, men designated limited duty category L-5 or L-6, and all enlisted women, are not assigned under Seavey-Shorvey. Assignments for these personnel are made on an individual basis by EPDOCONUS or BuPers. Billets for E-8s and E-9s are included in E-7 CPO billet listings. Billets for the service ratings (such as SOG) are included in the general (SO) listings.

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).									
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC & SRNC
Boatswain's Mate	BMC	713	641	131	215	60	43	35	99	131	25	95	157	62	20	61
	BM1	983	934	80	185	30	40	43	69	104	35	101	118	71	33	86
	BM2	1190	1250	112	212	27	32	24	99	115	31	40	172	78	24	66
	BM3/SN	1446	1501	130	250	35	11	13	59	129	24	20	120	41	19	69
Quartermaster	QMC	444	318	27	54	38	24	14	38	35	19	38	44	28	13	21
	QM1	532	416	22	45	12	18	6	33	47	29	62	32	24	12	21
	QM2	624	516	19	56	15	8	11	33	13	5	22	31	20	4	21
	QM3/SN	670	534	11	45	13	1	7	17	16	4	1	31	9	4	34
Signalman	SMC	99	104	4	7	8	9	8	18	33	16	57	73	15	3	7
	SM1	484	451	2	11	8	1	13	17	32	19	62	51	9	7	13
	SM2	636	622	5	18	4	6	3	15	59	20	5	23	14	2	14
	SM3/SN	738	732	6	17	5	0	3	13	17	2	5	23	12	1	16
Radarman	RDC	229	237	12	10	17	10	5	30	18	4	58	65	52	0	7
	RD1	604	596	16	26	22	5	11	49	44	13	85	97	24	7	6
	RD2	1257	1181	21	25	12	15	21	48	47	15	33	76	25	6	10
	RD3/SN	2550	2542	47	12	6	0	0	43	80	5	5	93	9	2	12
Sonarman	SOC	349	225	6	20	5	11	2	11	67	3	10	95	7	6	4
	SO1	585	401	7	21	14	11	7	24	94	0	21	77	13	8	2
	SO2	818	520	3	14	10	4	11	20	77	2	3	40	12	9	2
	SO3/SN	1299	950	0	20	11	0	12	27	8	0	0	11	36	31	0
Torpedoman's Mate	TMC	231	94	22	38	13	38	9	17	51	5	13	34	8	7	8
	TM1	589	320	23	54	9	61	9	25	57	3	21	29	11	14	5
	TM2	560	235	30	60	21	41	4	16	58	3	8	29	7	15	3
	TM3/SN	874	370	32	101	9	36	7	16	27	2	0	14	12	16	4
Gunner's Mate	GMC	344	367	26	64	26	21	25	57	69	45	114	139	19	12	28
	GM1	712	711	40	86	18	18	20	95	75	57	97	102	34	14	25
	GM2	960	990	39	95	20	11	19	101	92	27	33	126	31	23	23
	GM3/SN	1369	1478	55	119	9	7	14	137	112	34	12	106	30	19	9
Fire Control Technician	FTC	373	298	18	26	14	21	8	116	18	11	59	53	47	1	9
	FT1	765	553	9	14	15	23	12	153	23	13	76	47	52	4	6
	FT2	777	654	2	19	2	13	13	48	18	16	5	25	20	4	4
	FT3/SN	1334	1283	0	12	0	3	6	1	10	12	0	17	1	1	5
Missile Technician	MTC	110	36	2	11	0	1	1	50	10	2	1	14	52	2	4
	MT1	119	47	0	14	0	8	0	53	27	6	1	15	27	0	0
	MT2	224	72	0	19	0	2	0	26	27	6	1	22	7	0	0
	MT3/SN	389	151	0	19	0	0	0	12	27	10	4	37	6	0	0
Mineman	MNC	8	2	7	24	0	3	0	5	15	0	1	4	0	5	5
	MN1	16	2	7	30	0	2	0	5	15	0	0	4	2	1	4
	MN2	21	3	11	47	0	2	0	12	16	0	0	5	2	4	2
	MN3/SN	30	3	14	75	0	4	0	10	17	0	0	12	0	3	2
Electronics Technician	ETC	578	374	140	126	24	60	12	121	105	28	145	67	184	31	53
	ET1	1160	693	173	188	41	54	17	141	164	42	146	85	204	56	72
	ET2	1901	1253	225	255	38	47	20	95	176	41	39	112	109	45	77
	ET3/SN	2378	1750	323	311	40	18	13	83	209	44	4	137	88	35	82
Data Systems Technician	DSC	6	5	0	7	0	0	0	25	3	0	1	16	40	0	5
	DS1	11	13	0	13	0	0	0	19	6	0	0	16	41	0	7
	DS2	19	25	0	24	0	0	0	14	5	0	0	13	3	0	5
	DS3/SN	9	12	0	4	0	0	0	18	2	0	0	0	0	0	0

Afloat According to Your Rate

Note that the number of billets at each location represent the total number for that area and some or all of them may be already filled by personnel who are just beginning their tours there. The waiting periods of a particular rating in a specific area will, of course, depend on when these billets will be vacated by personnel now filling them under the rotation program. Therefore, don't rest your hopes for shore duty in a particular spot on this table. Your best bet still is to indicate a general area of choice or "Anywhere USA."

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).										
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC & SRNC
Instrumentman	IMC	19	14	0	1	0	0	1	1	4	1	6	0	1	0	0
	IM1	27	17	4	5	1	2	0	4	2	0	4	1	1	0	0
	IM2	42	28	2	6	0	3	0	2	2	0	0	6	2	1	1
	IM3/SN	53	31	1	5	0	2	0	2	0	0	0	2	1	0	0
Opticalman	OMC	23	14	0	2	0	5	0	0	0	0	9	1	0	1	1
	OM1	32	16	0	6	0	5	0	1	2	0	8	0	1	0	1
	OM2	41	27	1	4	0	6	0	1	0	0	9	0	0	0	0
	OM3/SN	68	38	0	8	0	6	0	3	0	0	0	1	0	3	0
Radioman	RMC	603	463	302	310	41	27	23	196	74	59	40	179	92	17	134
	RM1	1174	940	376	413	54	25	23	193	100	26	24	190	90	36	174
	RM2	1597	1285	616	639	75	33	35	211	135	26	35	155	128	46	206
	RM3/SN	3180	2874	1102	1232	103	33	35	370	214	52	23	246	259	61	242
Yeoman	YNC	392	326	193	210	37	37	29	157	88	45	64	100	64	18	244
	YN1	560	427	268	365	58	55	38	218	157	60	94	201	97	25	335
	YN2	715	619	261	420	80	82	70	326	251	76	174	271	156	47	292
	YN3/SN	823	729	265	490	125	72	48	388	279	90	95	351	170	39	287
Personnelman	PNC	66	65	39	51	17	18	24	125	72	17	61	117	39	13	50
	PN1	311	301	63	85	31	19	23	125	97	32	73	127	59	12	46
	PN2	234	230	64	96	27	36	30	161	141	36	87	176	64	17	62
	PN3/SN	403	413	87	147	41	30	28	165	165	36	81	265	113	22	64
Storekeeper	SKC	385	340	132	186	42	26	29	68	77	20	34	64	48	20	39
	SK1	803	637	142	247	30	25	17	79	86	22	25	91	44	14	47
	SK2	863	814	180	278	41	25	27	97	129	18	25	112	52	23	42
	SK3/SN	1147	988	216	299	50	29	25	111	123	32	49	117	58	15	57
Disbursing Clerk	DKC	40	36	31	34	9	8	9	22	21	12	12	22	10	5	10
	DK1	229	209	39	57	14	9	5	27	29	8	3	25	11	7	12
	DK2	196	172	36	40	10	7	8	40	40	7	8	42	19	5	18
	DK3/SN	118	108	42	71	17	14	8	33	46	17	8	51	23	3	22
Commissaryman	CSC	414	334	61	95	29	8	10	43	73	13	17	67	34	11	21
	CS1	841	728	108	131	43	12	17	73	118	18	63	128	62	16	55
	CS2	1044	921	143	203	53	21	21	128	182	34	120	177	93	21	72
	CS3/SN	1335	1174	195	215	60	27	25	164	224	30	148	266	110	34	89
Ship's Serviceman	SHC	58	57	44	68	14	6	7	22	41	15	11	38	25	8	15
	SH1	379	347	38	55	16	7	14	21	31	9	23	36	31	9	17
	SH2	551	535	39	62	19	9	11	35	48	9	12	46	36	8	13
	SH3/SN	807	742	37	70	22	6	10	38	40	6	11	58	38	7	6
Journalist	JOC	6	8	12	15	7	2	1	9	11	2	9	8	4	1	13
	JO1	10	12	11	23	3	1	3	7	10	5	12	11	4	2	13
	JO2	29	31	12	22	1	3	2	15	13	3	7	13	7	1	12
	JO3/SN	17	21	12	25	4	0	1	14	20	4	14	12	2	2	5
Postal Clerk	PCC	1	1	14	15	0	1	0	4	3	0	2	3	3	0	2
	PC1	21	32	20	20	2	2	0	12	5	0	3	6	5	1	1
	PC2	57	55	32	44	3	5	1	11	14	5	3	9	5	2	4
	PC3/SN	316	300	42	52	1	6	1	11	10	2	9	16	7	3	4
Lithographer	LIC	19	11	4	3	1	0	0	5	0	0	4	1	0	0	4
	LI1	41	37	11	5	3	0	0	8	2	1	1	2	0	0	7
	LI2	27	28	8	12	1	0	1	16	0	0	0	2	1	0	11
	LI3/SN	44	39	9	14	2	0	1	24	0	0	1	6	0	0	16

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).										
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC & SRNC
Illustrator Draftsman	DMC	2	0	3	7	1	0	0	9	3	2	1	9	0	1	6
	DM1	12	7	12	15	2	7	1	15	10	1	6	16	5	1	16
	DM2	32	25	12	25	4	4	1	28	16	3	6	21	9	2	21
	DM3/SN	23	14	17	21	0	4	1	29	25	5	6	27	8	1	9
Machinist's Mate	MMC	1025	841	24	36	37	42	42	83	80	28	147	177	42	39	15
	MM1	2044	1647	30	47	35	63	40	66	157	58	131	108	29	66	15
	MM2	2623	2117	30	37	24	58	28	81	178	38	47	69	35	51	26
	MM3/FN	3405	2839	44	23	40	25	24	79	98	31	26	82	74	21	31
Enginemon	ENC	580	424	30	60	21	79	38	45	68	34	95	61	30	27	35
	EN1	1179	907	65	139	31	79	27	58	101	42	94	116	63	41	47
	EN2	1473	1129	67	119	15	44	21	66	102	26	16	89	34	35	33
	EN3/FN	1800	1422	67	161	20	15	15	54	85	7	11	120	32	32	68
Machinery Repairman	MRC	60	52	9	11	1	5	6	7	7	2	17	25	10	5	10
	MR1	354	290	7	24	6	15	6	14	27	3	10	31	5	2	7
	MR2	279	184	12	27	3	17	10	30	15	6	23	17	11	3	2
	MR3/FN	392	291	5	16	2	11	3	10	24	2	3	19	5	3	1
Boilermaker	BRC	31	33	0	2	1	0	13	1	3	2	6	15	0	0	3
	BR1	211	192	2	0	5	9	10	8	4	5	18	1	1	1	3
Boilermon	BTC	512	493	16	14	38	17	24	35	53	30	77	111	24	20	11
	BT1	833	802	7	6	35	28	40	33	77	39	108	72	30	32	24
	BT2	1472	1417	11	8	33	11	18	53	89	16	30	66	45	30	19
	BT3/FN	2215	2177	5	10	37	6	9	45	47	9	10	26	43	11	34
Electrician's Mate	EMC	737	584	14	34	25	78	26	30	58	16	103	105	40	37	13
	EM1	1129	923	19	66	22	67	30	45	51	15	97	91	52	38	18
	EM2	1946	1503	40	107	23	62	28	62	69	8	36	79	38	34	32
	EM3/FN	2362	2003	32	96	12	18	19	40	57	8	4	58	41	26	29
I. C. Electrician	ICC	198	112	2	7	1	20	8	10	5	4	51	31	5	8	1
	IC1	672	451	11	13	2	16	6	13	13	2	77	38	6	19	7
	IC2	940	702	5	19	10	16	9	14	15	4	16	27	12	14	9
	IC3/FN	1040	785	10	13	9	12	9	24	30	15	0	30	18	6	7
Shipfitter	SFC	422	361	6	31	9	22	25	24	27	12	42	82	8	8	12
	SF1	732	609	12	49	12	45	26	29	43	9	65	89	28	6	11
	SF2	1115	931	13	58	3	57	20	24	18	5	23	49	19	17	14
	SF3/FN	1231	1039	12	60	5	36	15	23	23	6	4	47	17	11	7
Damage Controlman	DCC	82	87	21	32	12	5	16	19	28	3	7	30	31	5	12
	DC1	401	376	22	43	9	8	14	19	27	5	8	38	21	5	15
	DC2	376	356	22	49	8	12	4	23	28	1	17	27	14	4	26
	DC3/FN	387	342	17	36	1	5	11	23	22	0	6	26	12	3	15
Patternmaker	PMC	6	11	0	1	0	0	3	1	0	0	3	2	0	0	0
	PM1	20	8	0	0	0	0	0	0	0	0	0	1	1	0	1
	PM2	19	14	0	0	0	0	0	0	4	0	0	2	0	0	1
	PM3/FN	25	17	0	0	0	0	0	0	0	0	0	2	0	0	0
Molder	MLC	16	14	0	0	0	0	0	0	0	1	8	3	0	0	0
	ML1	13	11	0	1	0	1	0	1	0	0	4	3	0	0	0
	ML2	22	14	1	0	0	0	0	5	0	0	0	3	0	0	0
	ML3/FN	32	25	0	0	0	1	0	0	1	0	6	2	0	0	0
Construction Electrician	CEC	18	21	21	17	5	1	0	2	3	4	12	10	4	3	12
	CE1	43	26	33	34	7	2	1	5	4	1	11	13	0	0	14
	CE2	57	64	55	46	5	2	0	1	10	3	1	9	5	4	19
	CE3/CN	56	71	69	53	1	0	0	6	7	2	0	10	6	0	1
Equipment Operator	EOC	33	62	14	28	4	1	0	4	15	5	2	25	3	4	5
	EO1	61	96	28	46	8	1	0	6	28	10	0	32	9	1	5
	EO2	76	100	44	73	4	2	1	14	67	15	1	46	13	2	7
	EO3/CN	102	122	67	86	5	2	2	11	76	29	0	48	15	0	11

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Share Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).										
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC & SRNC
Engineering Aid	EAC	6	6	0	3	3	0	0	1	1	0	3	5	1	0	2
	EA1	8	12	4	11	0	0	0	1	3	3	0	4	1	0	1
	EA2	14	10	5	5	0	1	0	1	3	1	0	5	4	0	2
	EA3/CN	15	24	5	5	1	0	0	1	1	1	0	4	3	0	0
Construction Mechanic	CMC	23	21	17	27	6	0	0	1	3	1	8	15	2	0	2
	CM1	54	33	32	42	4	1	1	7	9	3	0	27	5	2	6
	CM2	55	59	55	61	6	1	1	4	12	4	0	23	9	1	2
	CM3/CN	89	74	48	49	6	0	1	1	12	5	0	32	7	2	1
Builder	BUC	39	61	29	29	11	1	0	9	6	9	20	31	7	1	4
	BU1	73	107	27	43	13	6	3	16	5	8	10	26	13	4	3
	BU2	104	135	32	45	5	0	2	5	6	4	6	16	4	1	1
	BU3/CN	167	226	54	41	2	1	0	8	13	4	0	21	3	0	2
Steelworker	SWC	9	21	5	6	1	0	3	0	4	1	2	8	1	0	1
	SW1	36	38	8	9	3	1	1	0	3	1	0	9	1	1	2
	SW2	35	60	11	9	1	1	2	2	5	2	0	10	6	0	0
	SW3/CN	52	73	18	13	2	0	0	1	1	0	0	12	1	0	0
Utilities Man	UTC	12	24	19	24	3	1	0	3	3	1	5	12	3	3	5
	UT1	36	31	35	44	5	2	1	4	6	0	0	6	3	0	8
	UT2	40	40	55	43	1	2	2	2	11	4	0	8	6	2	7
	UT3/CN	71	67	56	41	1	0	1	3	10	4	0	4	6	2	1
Aviation Machinist's Mate	ADC	372	385	165	193	25	7	34	101	535	167	24	205	130	28	117
	AD1	639	658	199	234	50	16	45	121	629	202	36	300	176	42	175
	AD2	839	897	294	313	49	0	47	133	607	228	8	377	254	51	248
	AD3/AN	1741	1884	513	540	105	2	78	228	1082	520	10	624	516	86	436
Aviation Electronics Technician	ATC	212	225	100	76	18	3	11	67	367	31	20	131	46	21	55
	AT1	372	419	171	165	26	7	23	101	442	75	22	204	86	30	85
	AT2	685	830	246	220	43	0	18	107	395	87	3	260	122	32	123
	AT3/AN	1100	1507	565	336	45	0	31	107	466	191	2	372	203	47	146
Aviation ASW Technician	AXC	73	67	2	4	0	0	0	2	58	0	0	17	0	0	4
	AX1	168	153	7	8	1	0	0	0	82	0	0	31	4	0	5
	AX2	242	230	14	14	1	0	0	1	78	0	0	30	2	2	6
	AX3/AN	495	470	27	25	10	0	3	12	88	0	0	82	11	2	20
Aviation Ordnanceman	AOC	128	149	22	23	7	2	4	25	100	18	7	52	31	10	11
	AO1	222	267	33	43	12	3	7	25	129	26	13	88	55	14	17
	AO2	363	422	44	58	19	0	4	32	104	37	1	117	70	13	23
	AO3/AN	851	1082	101	90	26	0	11	68	173	72	0	220	140	27	45
Aviation Fire Control Tech.	AQC	54	57	2	7	1	2	3	13	98	4	3	26	4	13	4
	AQ1	83	93	5	11	0	2	2	23	128	5	1	42	4	15	9
	AQ2	132	146	7	18	0	0	0	23	85	12	0	69	5	22	10
	AQ3/AN	276	280	11	16	0	0	0	44	100	18	0	125	4	41	12
Aviation Boatswain's Mate	ABC	95	116	35	27	6	3	41	22	61	12	12	33	15	3	17
	AB1	234	254	56	48	2	2	46	20	76	23	13	43	32	8	22
	AB2	394	422	73	64	10	0	36	34	80	31	0	65	57	11	30
	AB3/AN	456	549	110	84	13	0	36	39	147	33	3	73	78	8	31
Aviation Electrician's Mate	AEC	155	159	41	43	3	2	10	32	222	31	7	66	42	10	27
	AE1	283	307	73	89	16	4	16	53	310	86	13	138	107	15	64
	AE2	454	502	114	129	20	3	19	64	297	100	1	189	136	17	83
	AE3/AN	997	1090	238	209	35	1	23	99	493	199	1	335	214	34	148
Aviation Structural Mechanic	AMC	241	242	70	81	14	5	18	43	286	98	19	109	68	16	46
	AM1	417	434	122	153	27	7	21	71	515	203	22	205	141	31	98
	AM2	643	704	168	236	31	0	31	83	506	242	2	302	211	41	127
	AM3/AN	1285	1439	347	395	52	1	35	159	914	492	3	526	445	79	300
Parachute Rigger	PRC	22	18	12	18	2	0	16	11	34	10	2	22	10	4	9
	PR1	87	97	16	22	6	1	33	12	57	16	2	45	17	7	12
	PR2	92	109	24	25	8	0	8	19	80	22	1	52	30	9	20
	PR3/AN	136	153	32	41	9	0	6	20	86	29	0	80	45	9	29

Examples of how to fill in your Rotation Data Card



SEAVEY ROTATION DATA CARD

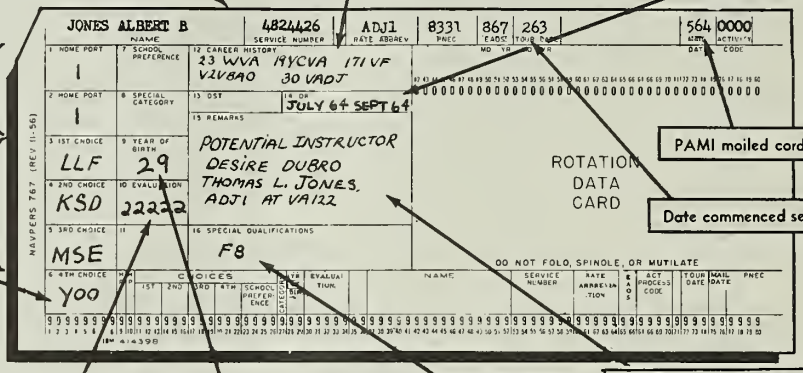
Home port numbered codes here indicate that Jones desires shore duty within the continental U. S. In the Seavey home port codes represent broad type of duty preferred.

Identifying information: name, rate, etc., punched and printed by PAMI.

CAREER HISTORY
Covers approximately 10 years' naval service. Numbers indicate period served on board ship or station. When this card was submitted for Jones, he was attached to an attack squadron. The first code indicates he has served on board 23 months. His squadron is based in "W" San Francisco. Before this he was attached to a CVA based in San Diego.—etc.

OPERATION
Jones' CO has indicated that the squadron will be operating on a heavy schedule and that Jones' services are urgently required from July through September.

Lettered codes for cities where Naval activities are located, such as
LLF—Lemoore
KSD—San Diego
MSE—Seattle
Jones indicates in these blocks his location preferences for shore duty.



PAMI mailed card this date.

Date commenced sea tour.

JONES indicated in 4th choice he would like duty "anywhere west of Mississippi."

EVALUATION CODE
Filled in by Jones CO. Evaluation shown here taken from enlisted performance record and converted to code. "1" represents outstanding, etc.

Born 1929.

SPECIAL QUALIFICATIONS
Jones is a qualified F8 mechanic. Other qualifications might be "fuel," "AEW," etc.

ADDITIONAL REMARKS
Information that Jones or his CO wish to bring to the attention of the assignment officers. Jones desires duty with his brother. VA-122 is based in Lemoore, Jones' first choice.

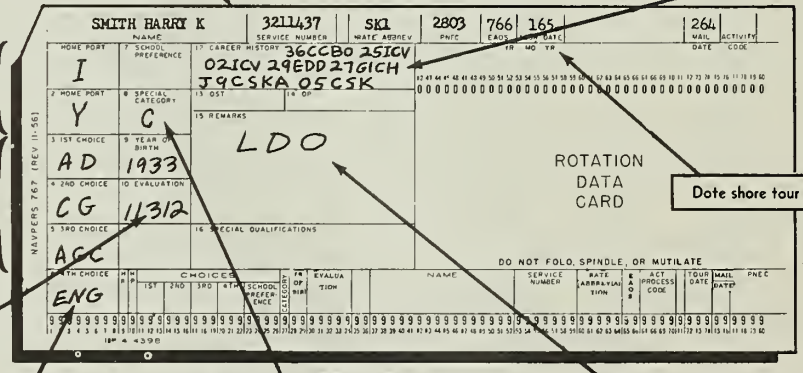


SHORVEY ROTATION DATA CARD

Identifying information: name, rate, etc., punched and printed by PAMI.

CAREER HISTORY
In this space Smith's history of tours completed before 1 Feb 1961 is shown in number and letter codes. Tours completed after 1 Feb 61 are automatically coded by machine and kept on file in BuPers.

When Smith goes to sea he wants to be based in Norfolk. However, if he can't have the East Coast, then he prefers a West Coast ship based in San Diego.



DUTY CHOICES
For sea duty Smith wants on AD, GG or AGC in that order.

Date shore tour expires

EVALUATION CODE
Filled in by Smith's CO. Evaluation shown here taken from enlisted performance record and converted to code. "1" represents outstanding, etc.

SPECIAL CATEGORY
Indicates Smith is on instructor duty.

Smith has been selected for commissioned grade, and his CO wishes to bring this to the attention of the distribution officers.

OVERSEAS CHOICE
If he must go overseas, he wants to go to England.

Key step in SEAVEY/SHORVEY Rotation Program is filling out your rotation date card aboard your activity. Information from these cards is used in making all sea and shore assignments.

For breakdown of full meaning of all codes used see the **Enlisted Transfer Manual**, Chapter 25.

		Total Seo Billets		Tatal Overseas Billets		Total Continentol U. S. Share Billets (includes District and Fleet Share Duty, Instructor ond Recruiting Duty, and BuPers Controlled Billets).										
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC & SRNC
Aeragrapher's Mate	AG1	80	65	41	64	7	1	22	24	35	14	2	25	17	5	17
	AG2	85	73	64	90	9	0	6	28	44	13	1	38	27	5	21
	AG3/AN	87	101	105	134	12	0	8	53	74	18	1	37	47	7	18
Aviotion Storekeeper	AKC	36	39	39	42	9	2	13	35	70	30	1	42	21	9	11
	AK1	100	118	60	60	13	2	13	48	92	34	5	61	49	11	25
	AK2	118	141	85	84	25	0	17	63	145	32	2	100	66	20	37
	AK3/AN	184	220	114	103	21	0	22	83	155	52	0	122	91	16	60
Aviotion Maint. Administratian-mon	AZC	10	2	1	1	0	0	0	0	14	0	1	1	0	0	1
	AZ1	45	34	7	7	0	0	0	1	25	9	0	4	1	0	3
	AZ2	62	45	9	13	0	0	0	1	35	12	0	3	1	0	1
	AZ3/AN	68	47	9	16	0	0	0	2	42	12	0	8	3	0	3
Photographer's Mote	PHC	53	37	16	31	6	1	4	12	55	3	4	27	5	1	44
	PH1	105	93	25	56	4	6	9	21	66	9	5	48	13	3	100
	PH2	183	136	39	77	4	3	7	30	59	10	4	62	13	2	125
	PH3/AN	166	122	40	104	6	5	7	30	66	15	5	75	24	1	164
Photographic Intelligenceman	PTC	8	9	5	6	0	0	0	6	3	0	3	0	1	2	14
	PT1	19	21	6	19	2	0	0	12	7	0	4	0	2	1	10
	PT2	21	25	9	10	0	0	0	14	7	0	1	1	1	0	20
	PT3/AN	37	42	1	20	0	0	0	11	6	0	3	3	1	1	17
Hospitol Corpsman	HMC	571	520	71	123	60	113	93	155	183	69	171	214	110	38	223
	HM1	513	598	103	212	96	122	109	205	269	63	152	290	161	39	263
	HM2	424	612	125	238	131	97	103	252	298	62	124	349	178	40	253
	HM3/HN	963	1581	265	580	552	381	390	892	1135	167	484	1425	553	145	669
Dentol Technicion	DTC	29	26	10	21	8	9	5	24	20	4	12	43	10	1	28
	DT1	61	69	22	41	13	7	5	28	38	8	14	62	22	4	34
	DT2	83	85	27	40	18	12	9	40	47	7	20	80	25	6	39
	DT3/DN	184	197	53	94	55	35	24	136	155	19	75	292	62	15	140
Steword	SDC	146	135	27	43	12	9	11	31	42	14	7	35	17	4	59
	SD1	532	446	41	64	18	8	14	40	66	22	12	53	35	7	58
	SD2	534	524	58	73	23	9	14	73	114	28	18	67	42	11	64
	SD3/TN	3748	3528	235	304	115	78	40	264	579	135	88	273	176	41	480

List of Motion Pictures Available to Ships and Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Dead Ringer (2594): Drama; Peter Lawford, Bette Davis.

The Hellfire Club (2595): Melodrama; Keith Michell, Adrienne Corri.

The Eyes of Annie Jones (2596); Mystery Drama; Richard Conte, Francesca Annis.

The Sword in the Stone (2597) (C): Cartoon; Character Animation.

Viva Las Vegas (2598) (C) (WS): Musical; Elvis Presley, Ann Margret.

Shock Treatment (2599) (WS): Stuart Whitman, Carol Lynley.

A Yank in Viet Nam (2600); Marshall Thompson, Enrique Magalona.

He Rides Tall (2601); Dan Duryea, Jo Morrow.

Sunset Boulevard (2602); William Holden, Gloria Swanson (Re-Issue).

East of Eden (2603); James Dean, Julie Harris (Re-Issue).

War Bonnet (2604); Charlton Heston, Susan Morrow (Re-Issue).

Last of the Buccaneers (2605); Paul Henried, Jack Oakie (Re-Issue).

Vice and Virture (2606) (WS); Catherine Deneuve, Annie Girardot.

The Crimson Blade (2607) (C) (WS); Drama; Lionel Jeffries, Oliver Reed.

Act One (2608); Comedy Drama; Jason Robards, Jr., George Hamilton.

Seven Days in May (2609); Burt Lancaster, Kirk Douglas.

King Richard and the Crusaders (2610); Rex Harrison, Virginia Mayo (Re-Issue).

Road to Zanzibar (2611); Bing Crosby, Bob Hope (Re-Issue).

The Ghost Breakers (2612); Bob Hope, Paulette Goddard (Re-Issue).

Huckleberry Finn (2613); Jackie Coogan, Junior Durkin (Re-Issue).

For Those Who Think Young (2614) (C) (WS): Comedy Drama; James Darren, Pamela Tiffin.

The Incredible Mr. Limpet (2615) (C): Comedy; Don Knotts.

Soldier in the Rain (2616); Comedy Drama; Steve McQueen, Tuesday Weld.

Four For Texas (2617) (C): Comedy Drama; Frank Sinatra, Dean Martin.

Dam Busters (2618) Richard Todd, Ursula Jeans (Re-Issue).

THE WORD

Frank, Authentic Advance Information On Policy——Straight from Headquarters

• NEW EXAMS—The first part of this month, the U. S. Naval Examining Center at Great Lakes, Ill., will send Navy commands two examinations for each of the general apprenticeships in pay grade E-3 for the following ratings: AN, CN, DN, FN, HN, SN, SN(W) and TN.

Each examination will have a total of 150 items (100 professional and 50 military) based on the *Manual of Qualifications for Advancement in Rating*. The examinations will come complete with instructions and scoring keys.

Although it isn't mandatory that the examinations be used, commands are encouraged, for the sake of uniformity, to use them whenever possible.

Hereafter, the examinations will be revised and forwarded each year. The examination booklets for advancement to pay grade E-3 sent to Navy commands in July 1961 should be burned.

• YN SHORTHAND — Yeomen no longer need training in shorthand as a requirement for advancement to pay grades E-6 and E-7. Effective 1 July, the stenographic requirements are eliminated.

There's still, however, a need for YNs with stenographic ability, though in numbers much less than now provided. As a result, two new class "C" shorthand schools will be opened in San Diego, Calif., and Bainbridge, Md. Only the most promising YNs (E-5 and above) will be nominated to attend. Classes at the new schools will convene quarterly with a quota of 10 YNs for each.

As a result of the discontinued stenographic requirements the YN "B" school will be shortened from 13 to seven weeks, and the present class "C" stenography school will be discontinued.

In spite of the discontinuation of the stenographic requirement, it might be borne in mind that yeomen who have stenographic skills will enjoy a better than average advancement opportunity through pay grades E-9 and in their selection to warrant or limited duty officer.

Two NECs have been established to identify those requiring shorthand skills: YN-2513, Court Reporter, Stenographic; and YN 2514, High Speed Stenographer.

• WEIGHT CONTROL — Slim down or ship out. This, in effect, is what overweight Navymen and women have been told in a new directive on weight control.

Commanding officers will give obese enlisted personnel six months to slim down to standards or leave the service with an unsuitability discharge.

Those who might be classified "Disqualified Obesity" are enlisted men and women who match up with any two of the following:

• Over the maximum allowable weight for enlistment.

• Can't pass physical fitness tests due to obesity.

• Present an unsuitable military appearance due to obesity.

Those who are squeezed into the "DO" category will first be examined by a medical officer. It will be determined whether the obese condition is due to unusual body structure, underlying abnormality, or simply because the chubby Navyman eats too much. It will then be determined how the obesity affects health or physical fitness and whether a diet and exercise would be appropriate.

If a diet and exercise schedule is ordered, the chubby Navyman will have six months to get down to standards. If at the end of six months the obese condition still exists, discharge will be recommended.

Details on these and other aspects of the "DO" approach to weight control are contained in BuPers Inst. 6100.6.

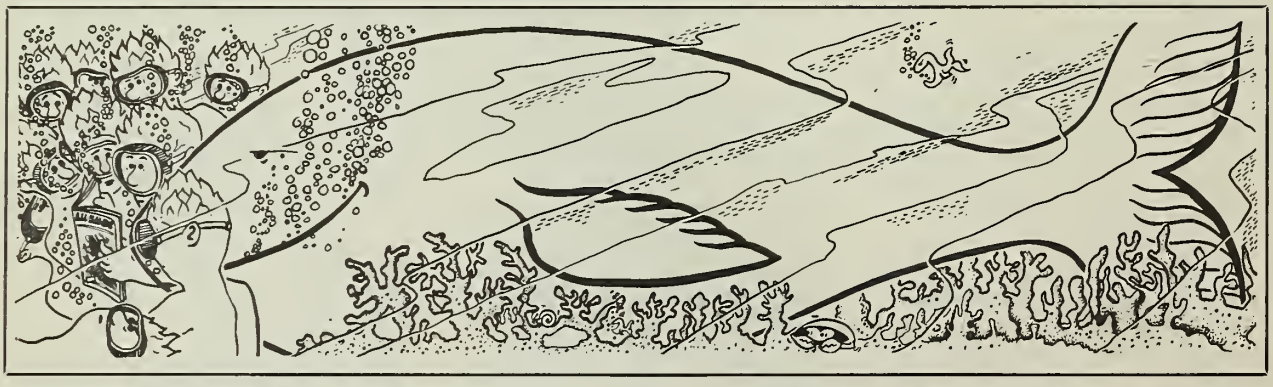
• NAVY EMBLEM—Now there is an official Navy emblem (not to be confused with the official Navy seal).

The official emblem has been designed and adopted by the Navy in response to numerous requests from individuals and commercial firms.

It is specifically intended to be reproduced for use on items such as stationery, clothing and jewelry which would normally be sold by Navy exchanges or by commercial firms.

Necessary controls over the use of the Navy emblem will be instituted to insure that it will not be used in such a way as to reflect unfavorably on the Navy or its personnel.

The Chief of Naval Operations has published the following regulations which govern the use of the emblem by commercial firms:



DON'T BE A CRAB—There's a whale of a lot of information in ALL HANDS—share it with nine other shipmates.

Civilian firms desiring to reproduce the Navy emblem for use on commercial products must obtain approval from the Director, Navy Publications and Printing Service, for reproduction by printing processes; and from the Chief, Bureau of Supplies and Accounts (Code OU) for reproduction by other than printing processes, for use on merchandise.

OpNav Inst. 5030.11A sets forth the regulations governing the use of the emblem, and contains an enclosure which depicts the emblem and gives the color scheme.

• GOOD CONDUCT MEDALS — Service eligibility requirements for the Good Conduct medal or award have been changed from three years to four. Although the change was effective 1 Nov 1963 a considerable number of inquiries on the subject are still being received in the Bureau.

According to the *Navy and Marine Corps Awards Manual* (NavPers 15790), the only exceptions to the rule are minority cruises. If a Navyman completes a minority cruise and meets the good conduct requirements he is eligible to receive the medal even though he has not served four years.

Even though your service began before 1 Nov 1963, you will still be subject to the four-year ruling. For instance, if your period of eligibility began on 14 Nov 1960, you would be entitled to receive the medal or subsequent award on 13 Nov 1964, providing you meet the additional requirements.

• FIRE CONTROL "C" SCHOOL— Applicants for the MK-68 Fire Control Systems class "C" school are now required to have a minimum of six years' total obligated service. Under the new rule, first term Navymen must either reenlist or extend their enlistments so that the combination of time served and time obligated will be six or more years.

The new requirement is contained in BuPers Instruction 1510.99.

In addition to the obligated service requirement, applicants must have a confidential clearance.

The 18-week course features complete maintenance training in the operational, alignment, corrective and preventive phases. Operating skills are not emphasized.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 6 — In connection with applications to Naval Preparatory School of prospective candidates to the U.S. Naval Academy, announced that the deadline for ordering examinations from the Naval Examining Center had been extended to 17 April.

Instructions

No. 2200.1 — Establishes policy and guidance for certifying and recertifying cryptographic maintenance personnel to maintain and repair cryptographic equipment.

No. 6100.6 — Amplifies weight control measures and establishes a means whereby commands may enforce weight reduction for enlisted personnel who are obese.

Notices

No. 6420 (25 March) — Supplements *BuMed Manual* with established waiver criteria of visual requirements for submarine training and duty for enlisted personnel.

No. 1418 (27 March) — Announced the schedule for substitute Navy-wide examinations for advancement to SD2 and SD3 held 19 May.

No. 1418 (1 April) — Announced the availability of examinations to be used for advancement in rate to pay grade E-3.

No. 1306 (3 April) — Clarifies the length of normal shore tours for personnel of AQ, AK and PT ratings.

No. 1430 (3 April) — Announced the names of those advanced in rating to Chief Petty Officer, acting appointment.

No. 1133 (22 April) — Offered further guidance in connection with obligated service requirements for enlisted personnel who are selected, ordered or who request service schools.

No. 1650 (27 April) — Provided instructions for the requisition and distribution of the Antarctica Service Medal and attachments, now available for distribution.

No. 1414 (28 April) — Announced the deletion of stenographic requirements for advancement to the YN rating, and the plan to establish two new Class "C" high-speed stenography schools.

No. 7720 (28 April) — Discussed policy concerning multiple payments of incentive pay.

No. 7000 (29 April) — Established procedures for accomplishing a service-wide verification of Pay Entry Base Date for enlisted personnel.

Navy Regs, One Century Ago

What was the old Navy really like?

Same idea may be found in the yellowed pages of an 1865 version of Navy Regulations, a copy of which is owned by H. D. Clark, ATC. The ancient Regs, which Chief Clark inherited from his father, says much to indicate the Navy has changed considerably during the past 100 years. For example:

• Every officer, or man, on reaching the quarterdeck, either from a boat or below, or on leaving it to go over the side, is to salute it by raising his cap, and this is to be acknowledged in return, and in the same way, by all the officers of the watch at hand.



• The Commanding Officer will permit a lighted lantern to be hung up in a suitable place during meal hours, and after evening quarters until tattoo, or the setting of the watch, from which pipes or cigars may be lighted. No pipes or cigars shall be lighted at the galley or on the berth deck.

• The Commanding Officer when in port may cause fresh meat and vegetables to be issued to the crew, not exceeding four days in the week, unless the Surgeon may recommend more frequent issue as necessary to their health.

• Boys shall not be enlisted under thirteen years of age, nor under four feet eight inches in height, unless as apprentices . . .

• Within the United States leave of absence for a longer time than one week will only be granted by the Secretary of the Navy, except in cases of great emergency, which must be immediately reported to him.

BOOKS

PERILOUS BUT EXCITING TIMES REFLECTED IN MONTH'S LIST

IT IS MAINTAINED by some historians that battles—not to mention entire wars—are usually shaped by events, and that the alleged leaders are swept along almost as helplessly as those under their command.

Not necessarily so, says Correlli Barnett in **The Swordbearers.** He insists that individual human character has a decisive effect upon events and, to maintain his position, assesses the character of four World War I leaders—two German, one French and one English—and their influence upon the outcome of the war. Through pictures of Moltke, Jellicoe, Petain and Ludendorff as they face their crises, and through their relations with colleagues, politicians and subordinates, Barnett shows us the entire panorama of the war and how these men affected the result. As he sees it, Moltke, the sensitive man in poor health became a weeping wreck as the German invasion of France slowed to a standstill before the battle of the Marne; Admiral Jellicoe, the cool, professional sailor, led into battle a fleet he knew to be inferior; Petain, another cool realist, saved the French army from collapse during the mutinies of 1917; Ludendorff – who personified the qualities of modern Germany—by his eventual loss of self-control, permitted the decisive battles of 1918 to be lost within his own headquarters. Whether or not you agree with his conclusions, Barnett makes a good case. And is readable, to boot.

If men do not control events, what about implements—hardware? Did the atom bomb end World War II? Will it end WW III? If so, what about the implements—or concepts, if you will—just now appearing on the scene? What about the dream of every science-fiction writer, the death ray? We won't go so far as to suggest that the laser might become a death ray, but who is to say it will not? In any event, just about everything presently known on the subject of the laser is discussed in **The Story of the Laser,** by John M. Carroll, the managing editor of *Electronics.* He describes with clarity and precision the "coherent" light beam which may well be our next miracle of science. It has tremendous possibilities for defense, industry, medicine and other related fields, and Carroll makes clear the present achievements of the laser and its tremendous potentialities.

With these cheerful thoughts we can turn to **Legion of Strangers** by Charles Mercer, almost indulgently. At the moment, the French Foreign Legion is regarded as a quaint anachronism. Perhaps for the more perceptive readers, the author has an important story to tell. Although he describes in excellent detail some of the more famous exploits of the Legion, those who are interested in questions of leadership in the Navy might give careful attention to the problem of converting men with no common background or loyalties, men with widely diverse moral and intellectual standards, men from every walk of life, into one of the tightest knit, most effective fighting machines known. How would *you* go about the job?

Strangers on a Bridge, by James B. Donovan, is also a thought-provoker. This is the story of the arrest, defense, imprisonment and exchange of Rudolf I. Abel, spy and, for years, chief of Soviet espionage in the United States. The story is told by his defense attorney, who describes in impressive detail the steps taken (these steps were taken as far as the Supreme Court) to ensure a fair trial for a known enemy charged with a capital offense. The actual details of the exchange of Abel for the U-2 pilot Gary Powers and Yale student Frederick L. Pryor, builds up into a nice climax.

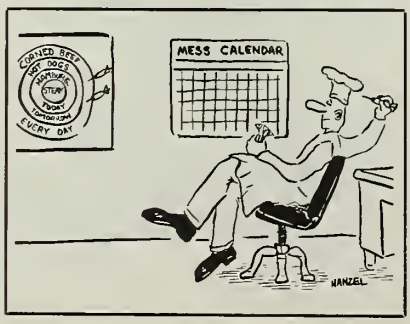
Another cliffhanger is **Four Against Everest,** by Woodrow Wilson Sayre. Don't be deceived. Although this is one more mountain climbing book, it has a twist. The four tackle the toughest approach to the (possibly) toughest mountain in the world without official backing and a very minimum of equipment and money. Since they didn't swing enough weight to get permission from the Chinese Government of Tibet, they went without that, too. Despite the apparent casualness of the preparation, they came so close to success as to make no never mind. Makes one rather wonder about the heavyweight, elaborate expeditions who did no better. Especially worth reading because of Sayer's comment about the philosophy of climbing. He also knows how to write.

Just to round out the month's reading list, you might want to try George Gamow's **A Star Called the Sun.** Somewhat more than 20 years ago, Dr. Gamow published *The Birth and Death of the Sun* in which he introduced to the general reader many new concepts related to large-scale liberation of nuclear energy and its influence on the evolution of the sun and other stars. It has since been reprinted many times. But in this period, however, great progress has been made in solar research—so much so that many portions of the earlier book have become obsolete. *A Star* brings you up to date.

Fiction also shows a wide range of interests this month. By a coincidence which cannot be considered very strange, **Convention,** by Fletcher Knebel and Charles W. Bailey II tells you all about presidential conventions in this year of presidential conventions. The villain in this instance is a computer, manipulated, of course, by other villains. The mechanics of the convention hall and the wiles of female and male politicians, as described in *Convention,* make you glad this is only fiction.

Compared to present-day traumas, **The Big Knives** by Bruce Lancaster makes everything seem so simple. Touching upon a relatively little known aspect of colonial history, Lancaster pays his respects to George Rogers Clark. With less than 200 men, Clark had vague orders to capture the settlements of Illinois from the British and Indians. His orders failed to mention how he was to do this with no more than a modicum of money and munitions. Told with the customary Lancaster flair, well salted with local color.

All-Navy Cartoon Contest
Joseph J. Hanzel, AE3, USN



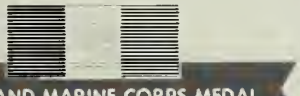
DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ SMEDBERG, WILLIAM R., III, VADM, USN, for service as Chief of Naval Personnel and Deputy Chief of Naval Operations (Personnel and Naval Reserve) from February 1960 through February 1964. Exercising dynamic leadership, keen foresight, and outstanding professional competence in mecting the challenge of manning a growing, complex, highly technical Navy during this critical period, VADM Smedberg initiated and vigorously pursued programs of far-reaching significance to improve the quality, standards, and morale of Navy personnel and to provide them with adequate compensation, benefits, and equal opportunity. In addition to the retention of far greater numbers of highly qualified personnel than heretofore, with concomitant savings to the Government in training replacement costs, these programs have made a positive impact on continuing efforts to maintain and increase the over-all efficiency, effectiveness and stability of the naval organization. Through his exceptional administrative ability, sound judgment and deep understanding of people and the importance of the role played by the individual in meeting the Navy's objectives and accomplishing its goals, VADM Smedberg attained a distinguished record of achievement.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ FOSTER, JOHN H., LTJG, USN, for heroic conduct on 4 Jan 1964 while serving on board USS *Locator* (AGR 6) in northeast Pacific waters. When large waves swamped and capsized the port motor whaleboat while it was about to be hoisted aboard the *Locator*, causing the crew of seven to be washed overboard, LTJG Foster quickly removed his outer clothing, donned a lifejacket, and dived over the fantail of the *Locator* into the icy and heavy seas to go to the assistance of one of the victims, who appeared to be stunned and was drifting away from the rescue area. Swimming approximately 300 yards in the face of 10-foot waves and 30-knot winds, LTJG Foster reached the side of the exhausted man and succeeded in towing him back toward the vessel where a shipmate aided him in completing the rescue. Having been in the frigid water over 30 minutes, LTJG Foster, himself, was suffering from exposure, muscular cramps and exhaustion.

★ MANNION, PATRICK J., MM2, USN, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As a member of *Remey's* rescue and assistance detail, which was sent to aid in fighting a fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Mannion unhesitatingly descended to the second deck, port side, of the burning ship and moved several injured men to safety. After this rescue, in the face of intense heat and heavy smoke, he assisted in removing two injured men and several other casualties from an area adjacent to and below the center of the fire. Three and one-half hours later, after assisting in still other rescues and manning a hose at the center of the fire, Mannion succumbed to smoke and heat, and was carried unconscious from the ship, only to return later and continue searching for and removing casualties for another two hours.

★ NORTON, ARTHUR L., QMC, USN, for heroism on 26 Aug 1963 while serving on board Uss *Grayback* (SSG 574) at sea. When a fire occurred in the after battery crew's berthing compartment, filling the space with smoke within one or two minutes, Norton, as Chief of the Boat, alerted personnel in his portion of the compartment and supervised their exit. Remaining in the compartment, he reported the casualty by telephone and continued to direct the abandonment of the space until it was no longer tenable and he was forced to leave. Moments later, he re-entered the smoke-filled compartment, discovered two men who had become overcome by smoke, called for assistance to drag one of the men to safety, and personally carried the other victim out of the compartment.

★ PEREZ, ASTRO A., BM1, USN, for heroic conduct on the night of 29 Nov 1963 while serving on board USS *Petrel* (ASR 14). As a member of *Petrel's* volunteer rescue and recovery party, which was organized to attempt the rescue of survivors of a yacht which had sunk in storm-tossed waters approximately 50 miles southeast of Charleston, S. C., Sea Buoy, Perez dived from the main deck of *Petrel* into the extremely heavy seas, swam to the side of two survivors, one of whom appeared lifeless, and aided in the recovery of both men. In risking his own life to save the lives of others, Perez displayed exceptional courage and selflessness.

★ RUTLEDGE, JOHN F., MMCS, USN, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As Chief Petty Officer in charge of a rescue and assistance detail, which was sent by *Remey* to aid in fighting a fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Rutledge boarded the burning ship at the hangar deck, where the fire had originated and was burning most fiercely, and directed the efforts of his unit in the dense smoke and extreme heat until relieved about two hours later by members of the New York City Fire Department. After this initial effort, and in spite of exhaustion, freezing temperatures and wet clothing, Rutledge remained at the scene for four more hours to direct his rescue teams and to assist in removing the dead and injured from the burning carrier.

★ VALOIS, DONALD J., SF2, USN, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As a member of *Remey's* rescue and assistance detail, which was sent to aid in fighting a fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Valois unhesitatingly descended to the second deck in the after section of the burning ship and carried an injured man to safety. After this rescue, he removed a second injured man from an area above the hangar deck in the face of intense heat and heavy smoke. He then assisted in removing several more casualties from this area. Finally, though partially overcome by smoke, and suffering from heat and exhaustion, he carried an unconscious teammate off the ship to safety.

TAFFRAIL TALK

As you may have noticed, ALL HANDS attempts to brief you on living conditions overseas from time to time. We would be the first to admit that some of these reports lack a certain element of realism but, on the other hand, not everybody sees a given situation in the same light.

With this in mind, we'd like to pass on to you USS *Galveston's* (CLG 3) report on living conditions in San Diego which, by the time you read this, she will have briefly visited after a long cruise in Japan. We quote in part:

San Diego (pronounced San-Dee-Ay-Go) is a friendly little fishing village located on the east shore of a large crescent-shaped bay bearing the same name. It has a population of 39,578 (based upon the 1910 census—the latest information we have. It may be somewhat larger by now). To the northward lies a movie-making city called Hollywood, which has a rather large suburb named Los Angeles (pronounced L. A.).

San Diego has subtropical climate but with sparse rainfall. The U. S. Navy has a small airstrip across from San Diego on a promontory called North Island. Also across from San Diego is an even smaller and sleepier fishing village called Coronado. Very little is known about this village.

The inhabitants are inquisitive, excitable and, above all, friendly. You will notice on arrival that large numbers of them, principally female, will exhibit their inquisitiveness by being on the pier when we arrive. They will be raised to a high pitch of excitement by such a commonplace event as our arrival. They will scream, squeal and wave their arms wildly. An occasional, but restrained, return wave is not only proper, but expected.

After we have moored, large numbers of them will swarm aboard closely followed by their young. (They frequently call their young "thosedarnkids"—a term which we are trying to find the meaning of.)

As if by pre-arranged plan, each of them will single out one of our ship's company, run up to him, and show great signs of affection. If two of them so approach you, we suggest that you retire promptly, with as much dignity as possible.

Their young will mimic their mothers and jump up and down and throw their arms around you. This is perfectly proper. If you are one of those to whom a female and young children exhibit their friendliness, it is prudent to respond in a gracious manner and to pick up one or more of the young.

Those of you who are not so favored may be envious of your shipmates who have been singled out, but perhaps you will be so greeted next time we visit San Diego.

When dining out, the waitress will place a series of metal utensils in front of you. These are called "knives" (for cutting), "forks" (for spearing the food and putting it into your mouth) and "spoons" (for putting liquids in your mouth). They are not as easy to use as chopsticks but, with a little practice, you can become quite proficient.

Although it will be difficult to get sushi, sukiyaki, tempura or rice ashore, be sure to try the typical American dishes like pizza, tacos, goulash, sauerbraten and smorgasbord.

Sounds like an interesting place to visit, but we don't think we'd like to live there.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington 25, D. C.

• **AT RIGHT:** FULL HOUSE— Harbar tugs maneuver the attack carrier **USS Constellation** (CVA 64) into berth filling the quay wall at NAS, North Island. When photo was taken, already berthed were **USS Kitty Hawk** (CVA 63) and **USS Ticonderoga** (CVA 14).



VERSATILE . . .



















THE U.S. NAVYMAN

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

SOCIAL SCIENCES



in this issue:

- EXPLORERS UNDERSEAS
- EXPLORERS in the ANTARCTIC

This magazine is intended for 10 readers. All should see it as soon as possible.
COPY ALONG

59.05
416

JULY 1964

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Issuance of this publication approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor. DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U.S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

JULY 1964 Nav-Pers-O NUMBER 570

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The Chief of Naval Personnel

REAR ADMIRAL J. O. COBB, USN
The Deputy Chief of Naval Personnel

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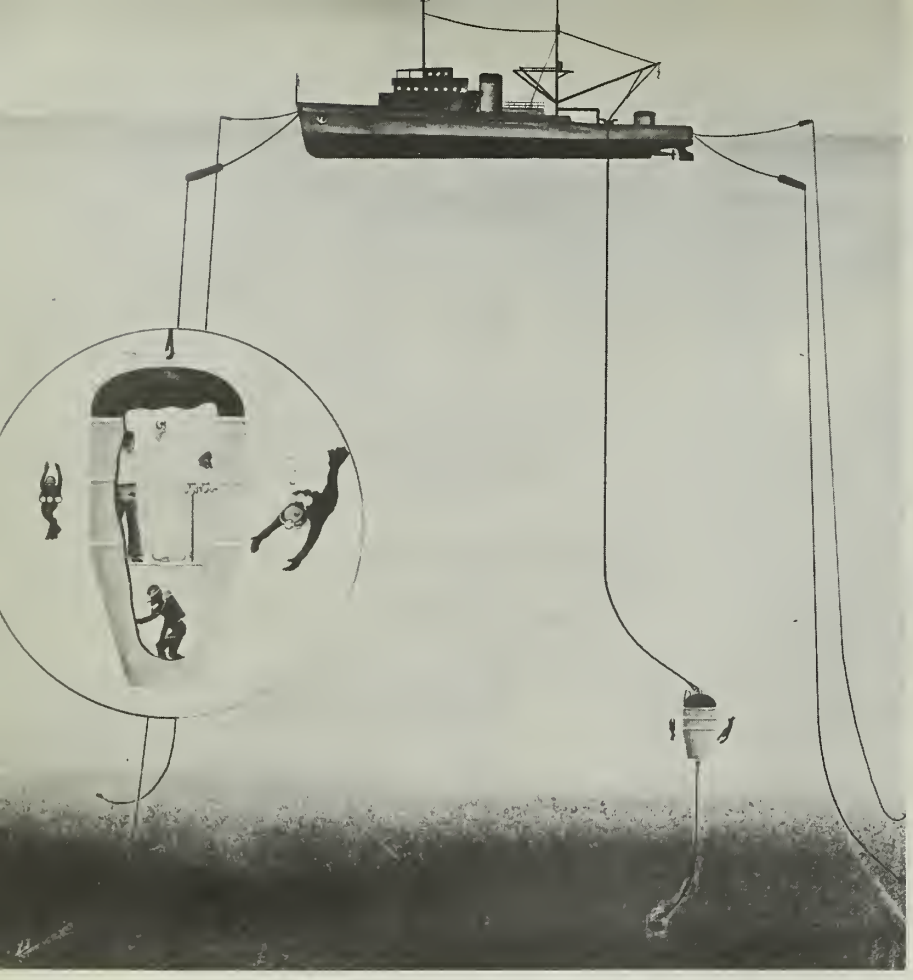
John A. Oudine, **Editor**

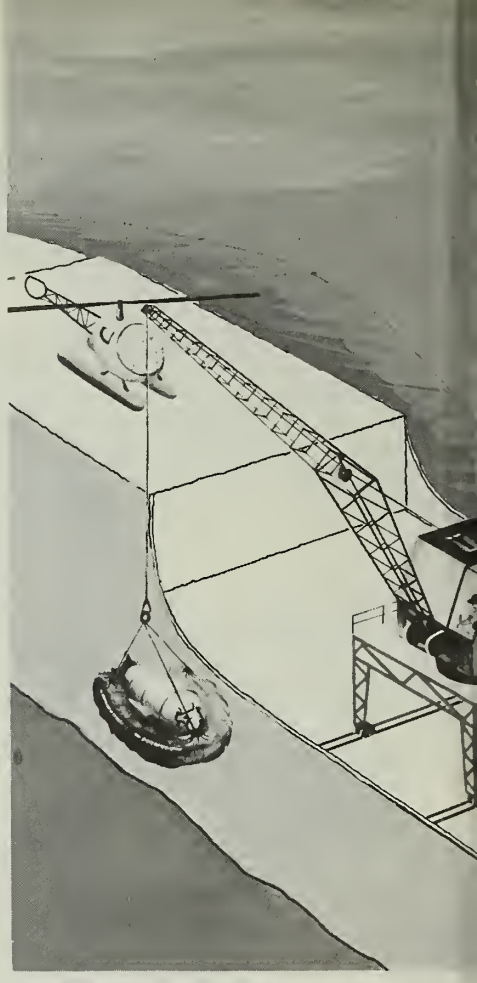
Associate Editors
G. Vern Blosdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

• **FRONT COVER:** COOL PROPOSITION—The frigid, ice-filled waters of Cape Armitage near McMurdo Station, Antarctica, pose no problem for Navy SCUBA divers Bill Douthit, PH3, and Louis Roane, PH2, as they ready for reconnaissance dive.

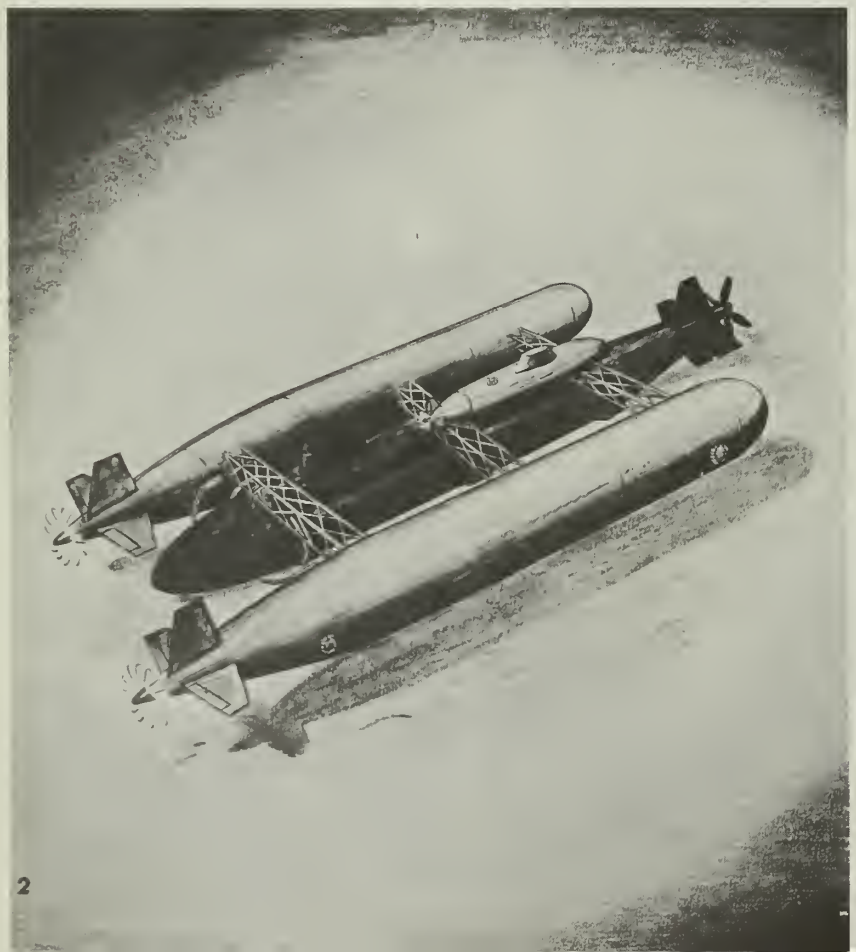
• **AT LEFT:** PRETTY AS A PICTURE—Rador picket destroyer USS Georing (DDR 710) looks sharp in bow-on view as she cuts a white woke during operations in Atlantic waters.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.





GOING DOWN—Proposed rescue craft can descend 6000 ft. *Below:* Self propelled pontoons might raise sub.

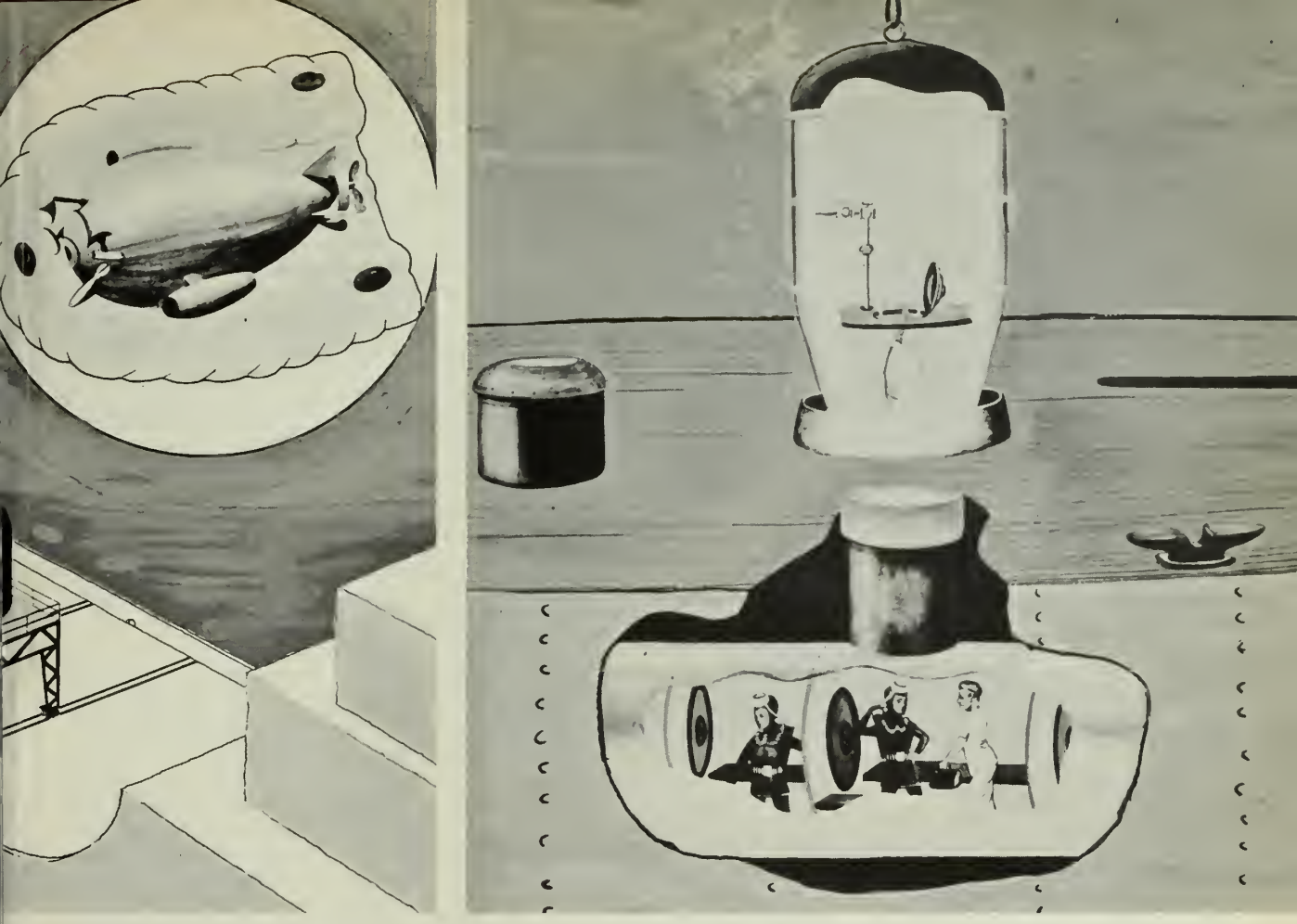


Navy's

THE GUARDED SOLITUDE of the deep may be nearing an end: The ocean's forces are again under assault by man. Last year a small group of Navy scientists and engineers met to lay down plans for another attempt to conquer the world's last great frontier.

Christened the Deep Submergence Systems Review Group, their mission was to review the Navy's methods of undersea rescue and recovery and to recommend further action to the Secretary of the Navy. Completed early this year, their report outlined bold new tactics for undersea rescue, search and salvage operations. Not only were new methods suggested. The report included detailed plans for three underwater vehicles, two of which could dive to 20,000 feet and reach 98 per cent of the ocean's floor.

The group's establishment stressed the growing importance of a new science called oceanographic engi-



WORK CRAFT would operate from ship or sub. *Rt:* Diving bell would connect with decompression chamber of sub.

Deep-Water Engineers

neering. As recently as 10 years ago, oceanographic engineering had small practical value.

But today, with the services and NASA using the ocean as a landing place for a wide variety of aerospace hardware, and with the growing emphasis on submarine warfare, oceanographic engineering has become a practical, high-priority science. Already several test vehicles for which airborne or surface recovery was planned have disappeared into the sea, carrying with them the information which they were sent into space to procure. As more submarines are added to the Fleet, the necessity for improved rescue and recovery techniques becomes crucial.

The researchers assigned to the group had no illusions about the problems which lay before them. The sea, they knew, was not without its defenses, its traps for the unwary. Though limited research vehicles had penetrated to the bottom, the depths have effortlessly thwarted almost every deep-water engineering attempt ever made.

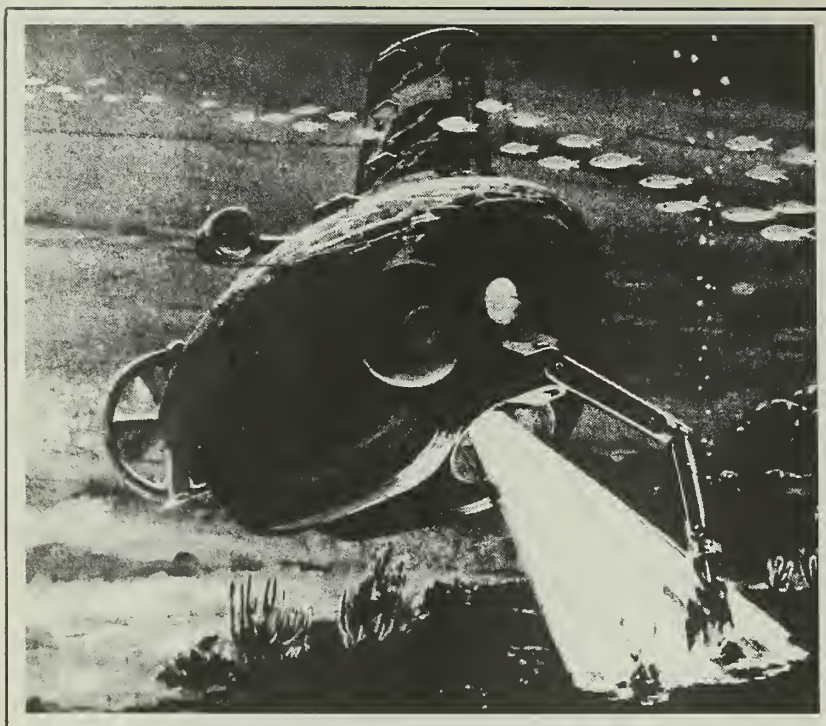
THE GREATEST problem faced by the group was the pressure which increases with depth and which limits divers to comparatively shallow water. A few fathoms below the surface, normal atmospheric pressure of 15 pounds per square inch doubles. At one hundred feet it has reached 44 psi, and at 20,000 feet—the depth at which DSSRG scientists someday hope to operate—the pressure has reached 8800 psi.

Perpetual darkness hampers work in deep waters. Sunlight never reaches beyond 1000 feet below the surface, often not that far. Sonar and searchlights may be used to locate sunken objects, but undersea landslides or bottom sediment stirred up by operations could cloud the water.

Sediment which is known to cover some parts of the ocean's floor may be a factor in the search phase of deep-water operations. If this soft mud is widespread, it may swallow sunken objects and make location extremely difficult.

Rusted wrecks of ships have complicated previous attempts to locate sunken objects. Magnetic search devices which measure variations in the earth's magnetic field caused by iron objects are invaluable in location attempts, but this instrument cannot distinguish between a piece of aerospace hardware and a submerged deposit of iron ore or the hulk of a tramp freighter. The British Navy encountered this problem while attempting to locate a disabled submarine. They discovered 1864 sunken ships in one 250-by-500-mile section of the English Channel and had to investigate each wreck to determine which was the submarine.

IN THE FIRST days of DSSRG's existence, the scientists encountered



Hello There—Here Comes Alvin

The undersea vehicle *Alvin*, which is somewhat similar to the DSSRG engineering craft, has already been built and is undergoing tests this summer. It will carry two men as far as 6000 feet down.

Several other submersibles are under construction by private industry.

Although it is more limited than the vehicles proposed by DSSRG for future construction, *Alvin* will represent an advance over the bathyscaph *Trieste*. Knowledge gained during the construction and operation of the vehicle will probably result in the improvement of submersibles now on the drawing board.

Alvin will operate principally on the continental shelves, where the bottom is within its maximum depth limit. When tests are completed it will be used for research and to inspect – perhaps maintain – man-made equipment on the ocean's bottom. It could also assist in the recovery of sunken objects.

The craft is battery powered and will be equipped with searchlights, one hydraulic manipulator, and electronics gear. Unlike the DSSRG submersibles, it will be based on a surface ship or ashore.

The pressure sphere, which will shield the crew and equipment, was tested last December and January. The sphere is almost seven feet in diameter and has walls one and one-fourth inches thick. During tests it successfully withstood pressures greater than the 2640 pounds psi which it will encounter at 6000 feet below the ocean's surface.

a barrier which has frustrated oceanographers for centuries: Lack of knowledge. Although oceanographic ships are constantly at work surveying the sea, most of the ocean's 140 million square miles remain uncharted in detail and few of the ocean's submerged currents have been mapped. (Several submerged currents may flow beneath any surface point, each moving in different directions at individual speeds.)

DSSRG researchers were not dismayed by the problems. Instead they began an investigation of existing undersea operating techniques to determine whether or not the present-day concepts could be modified and used for the rescue of submariners or the recovery of submerged objects.

The results of this initial study were not hopeful. Based on surface craft, subject to the whims of weather, today's engineers must attempt to find and recover submerged objects by lowering instruments an average of more than two miles to the ocean's floor. With 12,000 feet of water separating the operator from his tools, there is little chance of performing the precise manipulations so necessary for rescue and recovery missions. To make matters even worse, the instruments may swing wildly under the influence of the ocean's overlapping currents.

The study, however, did illustrate two important facts to the group. *One:* the Navy could not recover sunken missiles, space vehicles, ordnance items and submarines by dangling hooks at them from two miles above—too chancey a business. *Two:* rescue missions could not be subject to the mercy of prevailing weather. Trapped submariners cannot wait weeks or months until weather conditions are satisfactory for operations.

ALL OF TODAY'S methods have their limitations. The Navy's deep-diving research bathyscaph *Trieste* is more suitable than other systems, but even it falls far short of the mark. *Trieste* is surface based, has a horizontal cruising range of just two miles and is capable of performing only very light work while on the bottom.

But, though the bathyscaph was not the full answer, the group believed it did point the way to success. So they undertook to incorporate its good points into their plans. At the same time they began searching for new ideas to make up for *Trieste's* shortcomings.

The resulting concepts and designs represent a new approach to the problems and may change the course of underwater history. Perhaps scientists in the future may abandon surface methods and carry the battle for conquest to the sea's own dark stronghold.

Rescue operations proposed by DSSRG, for instance, would take place entirely underwater, where men and equipment are impervious to weather conditions. A search and rescue submersible would ride to the aid of a sunken submarine while attached over the deck hatches of a mother sub.

Upon arrival the search craft would detach from the mother sub and, using searchlights, sonar and magnetic detection gear, locate the disabled craft. The search submersible would be a teardrop-shaped craft capable of carrying three men to depths as great as 20,000 feet.

Once the disabled submarine was located, rescue would be made by a bell-shaped vehicle which, powered by battery-driven screws, would ferry the trapped submariners from their ship to the mother sub in groups of two or three. The rescue submersible is designed to have a depth limit of 6000 feet.

ENGINEERS have designed another teardrop craft which would be used for recovery missions. This submersible is designed to be primarily surface-based, since delays do not constitute a major problem in salvage operations. This craft, however, could operate from a submarine in case of emergency.

The recovery craft would be equipped with two manipulators, carry three men to depths of 20,000 feet and perform any work which could be undertaken by a diver at lesser depths.

Neither the work nor the search craft will utilize ballast tanks at great depths, for tanks could not be blown due to the pressure. Instead, they will use basic aerodynamic principles to rise or descend. They will both be equipped with battery-powered electric motors and with several small ports for viewing. Their pressure hulls are eight foot spheres. The outer hull, through which sea water may circulate, is teardrop shaped for streamlining purposes.

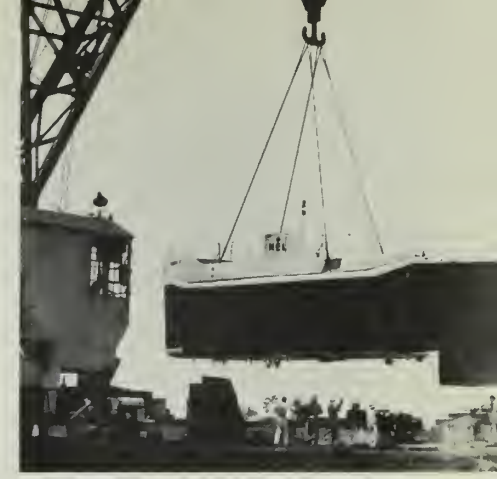
According to Rear Admiral E. C. Stephen, the veteran submariner who headed the research group, oceanographic engineering is at the same stage of development as was the airplane when the Wright brothers launched their first heavier-than-air craft at Kitty Hawk. The potential, he feels, is as great.

Other scientists agree. Although DSSRG's studies were confined to search, rescue and recovery missions, the techniques which they developed have many industrial uses.

When oceanographic engineering techniques have been perfected they will have a number of defense applications. Underwater sonar stations, for instance, similar to the DEWline in Alaska, could be placed on the bottom to track hostile submarines. These stations, which could beam sonar waves up against the fairly uncomplicated surface background, would be much more effective than sonar stations which beam down against the uneven ocean floor.

Many oceanographers, attempting to look into the future, predict that the sea and its products will grow in importance as the years pass, and that one day it may be the major source of food, water and minerals for an expanding world population.

No one really knows how the oceans will affect future generations, nor if DSSRG will be remembered by historians. But, for today, the Navy's interest in the underwater world has intensified and a search for the key to Davy Jones' locker has begun. —Jon Franklin, JO2, USN.



PIONEER—Navy's deep 'ship' *Trieste* (shown here after remodeling) has helped find new ways for exploring.

Deepscan *Will Scan Rocks of the Deep*

French and U. S. scientists have pooled their resources for a joint investigation of the Puerto Rico Trench, deepest spot in the Atlantic Ocean. They are using the French bathyscaph *Archimede*, which is capable of carrying three men as deep as seven miles below the surface.

Operation Deepscan, as the project is called, began in May and will continue at least through July.

The U. S. part of Deepscan is being supported by the Geophysics Branch of the Office of Naval Research. The Navy's Electronics Research Laboratory at San Diego, Calif., is also participating, as are a number of French and U. S. scientific institutions.

One of the chief aims of the U. S. team is the study of an outcropping of rock on the north wall of the trench, about 22,800 feet beneath the surface. The outcropping is believed to expose a layer of rock which normally lies about 1000 feet beneath the ocean's bottom, covered by a layer of sediment and another of basalt. This strata has never been seen nor sampled, and its existence was substantiated only by seismograph readings.

The Puerto Rico Trench is a 450-mile-long submerged canyon, located about 70 miles north of the U. S. Naval Station at San Juan, where Deepscan is based. The canyon's floor lies 27,510 feet beneath the surface.

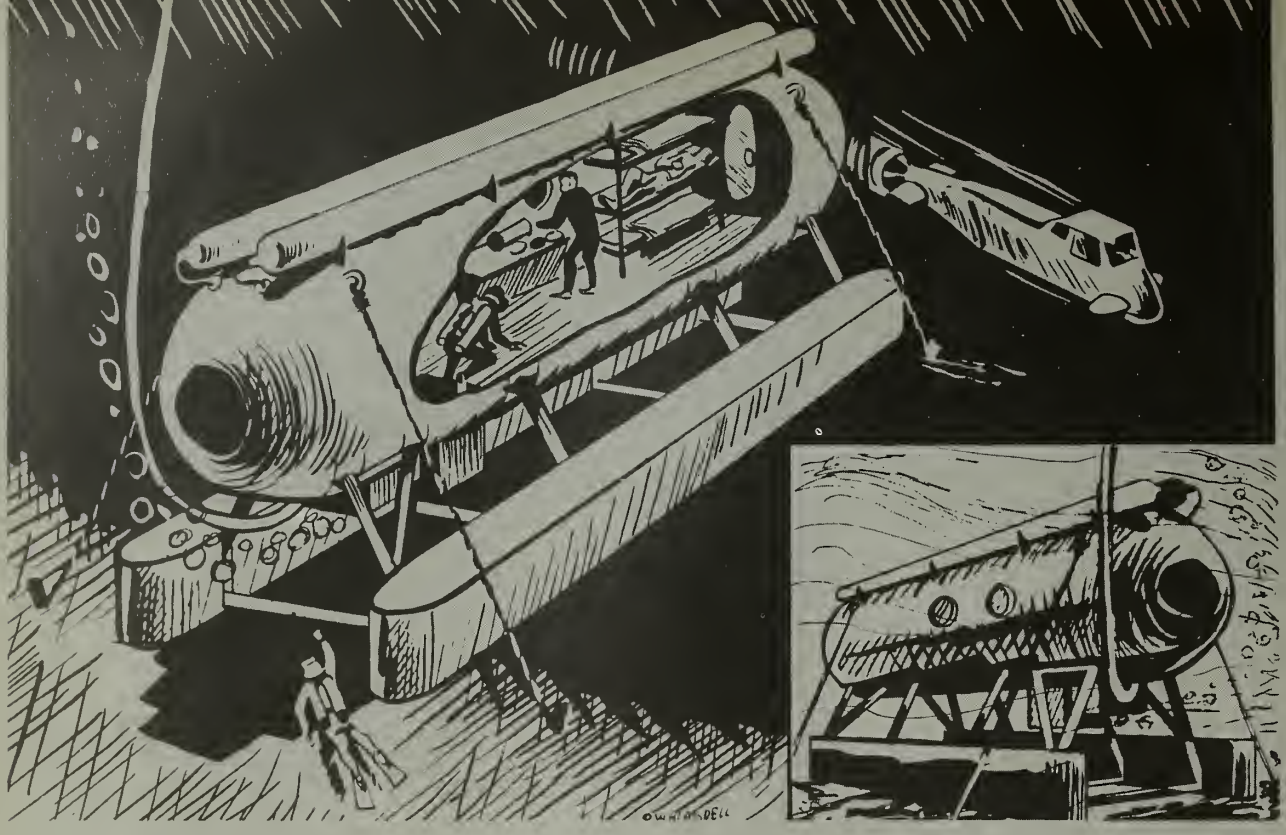
Scientists from both nations are carried into the abyss by the bathyscaph. *Archimede* is fitted with a diamond drill for taking rock cores, and has a robot arm on the bow which can scoop up rock and mud samples. There are also instruments for recording pressure, temperature, and the speed sound travels at various depths.

Photographic equipment in the craft includes two still cameras, four electronic strobe lights, and a television camera which can be monitored from the inside.

The bathyscaph is battery-powered and has a top speed of about three knots. It is 70 feet in length with a 13-foot beam. The crew of three consists of a pilot, a technician and a scientist. Their safety is guarded by a device which allows the pilot to blow ballast and surface quickly in the event of power failure.

Deepscan has brought together a large array of oceanographic equipment. Ships included are the French escort vessel *Marcel le Bihan* (escort ship for the bathyscaph), USNS *Marine Fiddler* (TAK 267), *Atlantis II* (a Woods Hole Oceanographic Institution craft), and the research ship *Robert D. Conrad*, belonging to Columbia's Hudson Laboratories.

In addition to investigating the rock outcropping, scientists are conducting several other oceanographic projects, including studies of the properties of water, transmission of sound through sediments, and undersea photography.



Three Weeks in Sealab

WE ARE LIVING in a truly remarkable era, and reminders of this fact are everywhere around us.

In outer space we are witnessing a fantastic transformation into the 21st century world of Buck Rogers, such as we used to thrill to—but scoff at—as we read the Sunday funnies.

And now, in inner space—that 70 per cent of the earth's surface which is covered by water—the Navy is beginning an experiment which will reveal what it's like to live and work deep underwater for extended periods of time.

Four Navy divers—a doctor and three enlisted men—are involved in the first phase of this experiment, called Sealab I.

One day early this month they are scheduled to dive nearly 200 feet at a spot 30 miles southwest of Bermuda, then remain underwater, living, eating, sleeping and working there, for three weeks.

The whole project is directed toward developing a capability to do useful work underwater, over a long period of time, without a need for the divers to waste precious time decompressing after each dive.

The decompression time for a 200-foot dive with one hour's bottom time is two hours; one hour's work at 300 feet requires at least three and three-quarter hours' decompression time.

During decompression, the diver—exhausted, wet and cold and wearing about 300 lbs. of equipment—dangles from the end of a line while he is winched slowly to the surface. He is stopped at intervals during the ascent so the gas absorbed by his blood stream can be gradually released as the pressure around him decreases.

THE LIFE of a diver who can live underwater would be quite different. He would be required to decompress only once—when he finally surfaces after completing a job. Meanwhile, he could return to his underwater quarters after work each day, take a shower, cook his meals, and lounge on his bunk with a book-of-the-month club selection. After a good night's sleep and a hearty breakfast, he would don his scuba gear, ease his way down a ladder into the open sea and return to the job.

In Sealab I the Navy, and particularly the Office of Naval Research, are exploiting this radically different concept in diving, where human beings are not tied to their surface existence. Here, they have all their necessities underwater with them.

The Navy divers will live in a 40-by nine-foot laboratory, which is actually a steel experimental minesweeping float that has been modified for this experiment. The lab and living space occupies 30 feet of the tank, and the other 10 feet houses an electrical power transformer, supplies and equipment for voice communication with the surface.

The Sealab is equipped with electric lights, bunks, lavatory facilities, work bench, heaters, dehumidifiers, emergency water tanks, a fresh water shower and cooking facilities.

Two ballast bins (huge, pontoon-like structures attached to the lab), filled with 72 tons of scrap metal, provide the necessary weight to sink and hold the lab to the ocean floor. This amount of weight is necessary because the lab weighs only 15 tons

but displaces 67 tons. There is 20 tons of "negative" ballast added as a safety factor.

THIS TEST is scheduled to take place near the Navy oceanographic research tower Argus Island, a 260-foot-high structure that rises out of the Bermuda waters. This site was chosen because the ocean bottom is flat and visibility is good.

In the course of the test the men will work on three projects: They will conduct fouling and corrosion studies on the structure of Argus Island; implant an array of oceanographic research equipment which will remain at that underwater site to telemeter current velocity and direction; and the rest of their working time will be spent on a photographic assignment, completing a detailed photo mapping in the area of Argus Island.

While free-swimming the divers will utilize semi-closed-circuit scuba gear and limit their time out of the lab to 80 minutes so as to retain a 100 per cent safety margin with their gas. "Hookah" rigs—breathing systems which are supplied with gas by hoses leading from the lab—will be used while working in the immediate vicinity of the lab. This will allow the divers to remain at their work for extended periods.

The atmosphere in their quarters consists of a helium, oxygen and nitrogen mixture at a pressure of 86 pounds per square inch—equal to the water pressure outside. Because the pressure is equalized, the men will not have any sensation of being under pressure.

The lab temperature inside will be kept at 90 degrees, which will be comfortable because of the increased heat conductivity of the artificial atmosphere. The only physical effect present to remind the divers that they are in an alien environment will be what is called the helium speech problem, which produces Donald Duck type speech. This is because the atmosphere is too thin to allow proper vibration of the vocal chords.

ON THE SURFACE, the large covered lighter *YFNB-12* will maintain a support post to supply electrical power, emergency gas, communications and fresh water to the lab. Except for these services the Sealab crew will maintain an autonomous existence.

Observers on *YFNB-12* will continuously monitor Sealab operations via closed circuit television. Communications will be maintained around the clock. In addition, *YFNB-12* has a submersible decompression chamber which can be used to evacuate Sealab's crew if necessary. Provisions have also been made for the autonomous survival of the capsule inhabitants in the event of loss of support from the surface.

The men participating in this experiment were chosen from several dozen volunteers. They are highly



DIVERS for the experiment have participated in previous long duration high pressure projects. Here, diver starts simulated 500-foot dive in pressure tank.

CLEAR WATERS off Bermuda near Argus Island will be site of Sealab test.





WORKING BELOW is now limited, requiring long periods for decompression after each work session. By staying below in Sealab much time is saved.

qualified divers who have experience in long duration, high pressure projects (such as some work performed in pressurized diving tanks—see ALL HANDS, January 1964, "How to Make a 500-Foot Dive").

This will be the longest stay underwater for any human under these type conditions at this depth to date. (In 1962 the French undersea explorer CAPT Jacques-Yves Costeau established an underwater manned station on the continental shelf off Marseille, France. A year later two men from Costeau's research group occupied a helium-atmosphere station 90 feet under the Red Sea for a week, and another party stayed at a shallower depth for four weeks.)

BUT THIS PROJECT was not conceived with an eye necessarily to establishing records. As in any experimental project where a human safety factor is involved, this project must be taken step by step. This depth and duration were chosen as the first step. It was figured that if the divers remain underwater for three weeks, this probably proves all that needs to be known about their ability to sustain themselves underwater for even longer periods.

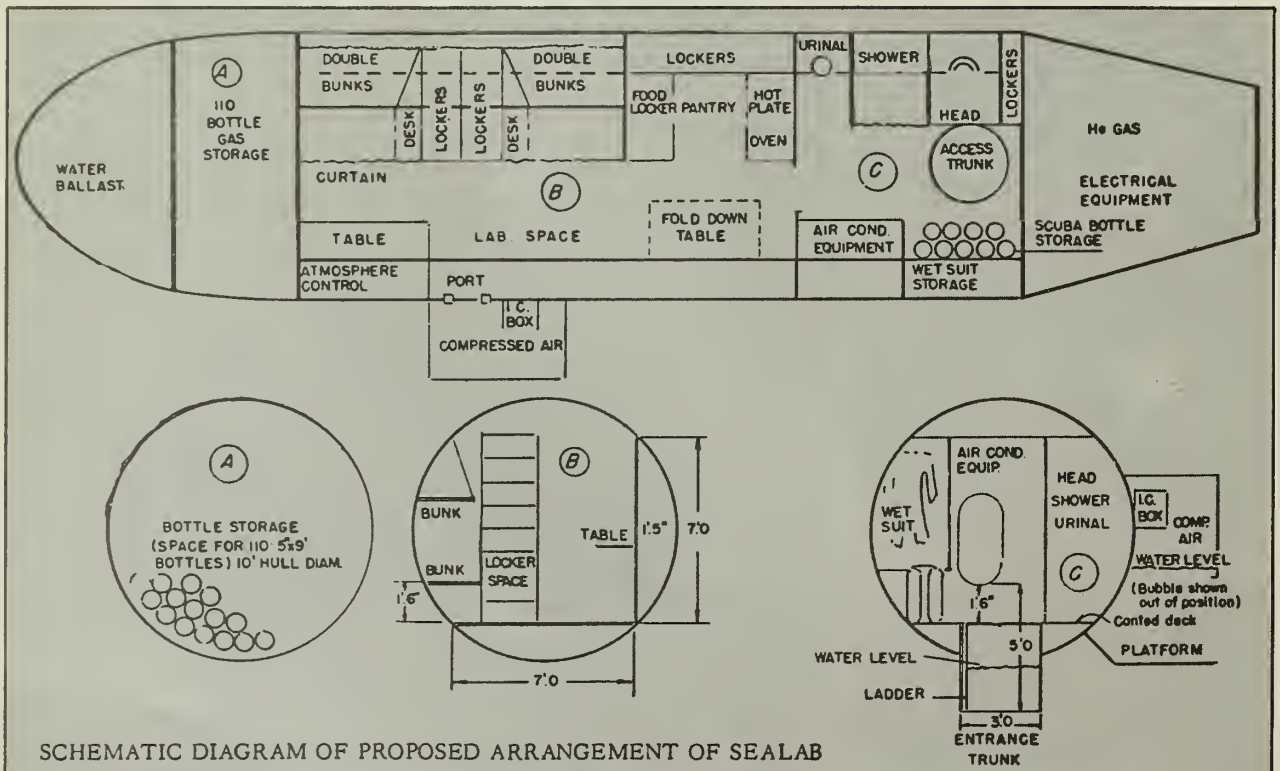
The Navy feels it can probably develop a capability for doing long duration work at 600 feet without the benefit of any major breakthroughs. And it is optimistic about the possibility of developing this capability to 800-1000 feet.

The next logical step is to plan to go to about 400 feet for three weeks. This might be planned for next year, depending on what is learned.

If this underwater working capability can be developed, it will have applications in the areas of salvage work, underwater construction (bridges, tunnels, towers, etc.), implantment of oceanographic research equipment, and underwater mapping, to name a few. Perhaps the most important applications are completely unknown at present.

Meanwhile, to our courageous underwater inhabitants, we bid "smooth diving."

—Bill Howard, JO1, USN



SCHEMATIC DIAGRAM OF PROPOSED ARRANGEMENT OF SEALAB
Overall dimensions - 40' x 10', Living Space 36' x 9'





ON TARGET — *USS Constellation* (CVA 64) fires missile at drone. *Left: Target's response is checked from P2V.*

Fleet Skeet Shoot

ALL GOOD SHOOTERS need plenty of target practice. In the Navy this includes our anti-aircraft defense units.

Four Pacific-based air squadrons exist for the express purpose of providing target practice services for guns, missile batteries and fighter squadrons. This anti-aircraft target practice is frequently called a skeet shoot.

If a First Fleet aircraft carrier wants to go on a skeet shoot, it must begin with a request to Commander Training Group, U. S. Pacific Fleet. This scheduling agency in turn sends a message to one of the utility squadrons. If the message is directed to Utility Squadron Three (VU-3), the squadron's planning officer starts the wheels in motion by selecting the type of drone to be used.

If the shoot is to be a gunnery exercise, the drone chosen will be a 220-mph KD2R5 which can be launched either from a target range or from the defending ship itself. For a missile shoot, the pigeon used will be a 500-mph Q2C *Firebee*.

VU-3 can build a drone to fit any special need. For example, if air-to-air *Sidewinder* missiles are to be fired, the basic Q2C is modified to prevent the heat-seeking *Sidewinder* from going up the drone's tail pipe and exploding it. This is done by mounting flares on the outboard trailing edges of both wings. The flares provide heat more intense than the engine's exhaust and serve as heat guides which cause the missiles to miss the drone.

The avionics shop at VU-3 can install special electronic equipment which will deceive radar receivers on the defending ship. The drone can be made to appear as a fighter or bomber of almost any type, establishing a higher degree of realism during an exercise.

An exercise begins with two drones being mounted on a P2 *Neptune*—the second one providing a back-up target. The crew is briefed and the *Neptune* leaves NAS North Island for the target area.

Immediately before reaching the drop area, an operator in the mother plane radios the RCO or Remote Control Operator on the ground for a final check that the drone's electronic systems are functioning properly. The engine is started and the drone falls away. Then the RCO flies the drone on a predetermined course.

As the drone heads toward the defending ship it is picked up on the ship's radar. The target is identified and its position plotted. A weapons officer assigns the approaching target to one of the ship's missile batteries and a coordinator chooses the kind of missile to be used in the kill. From CIC comes the word to fire, and the missile leaves the launching rail and streaks toward the incoming drone.

As the missile seeks its target it sends out radar waves which are recorded by the drone and make it possible to calculate how closely the missile passes.

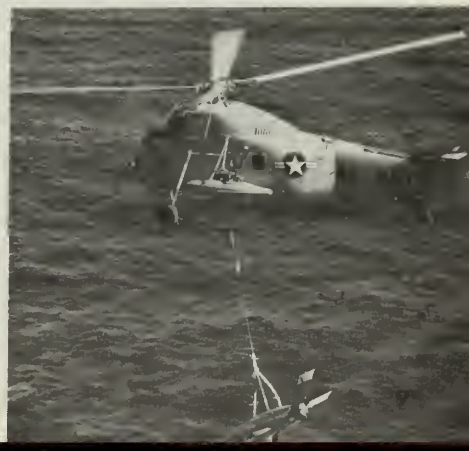
After the missile shoot, the drone continues through its pattern and is pursued by the ship's aircraft. Pilots flying combat air patrol missions each make a firing run with *Sidewinders*.

With the skeet shoot over, the drone falls by parachute into the ocean and is retrieved by a helicopter. Back at its home station the drone is disassembled, cleaned, repaired, reassembled and readied for another run.

Aboard the carrier, results of the skeet shoot are reviewed. Whether the results were excellent, good or fair, there will be another skeet shoot soon.

—Kyle McGonigle, JO1, USN

SHOT DOWN—*Firebee* is recovered by copter for re-use after Fleet missile men shot down the enemy.



In the Wake



FAST WORK—*USS Salisbury Sound* left for disaster area 5 hours after quake.

The Good Friday earthquake that rocked Alaska and generated huge, smashing tidal waves has been described as one of the worst natural disasters in United States history. To the rest of the world the earthquake has faded somewhat into the pages of history, but to those who lived through it – and who are now building their way back through the rubble–the memory is still vivid.

Though damage to Navy installations in Alaska was relatively minor, Navymen in the 49th state and elsewhere played a considerable part in the emergency recovery and long range mop-up that has followed. Here is the follow-up report.

It was 27 Mar 1964, about 1730. At Naval Station Kodiak, mess cooks were securing the galley after evening chow. Men who didn't have watches to stand were making plans for the week end.

At the BOQ, ENS D. D. Henricks of Patrol Squadron Two was dressing for dinner. He was thinking that it was Good Friday, the day the Bible says became black as night and the earth shook and opened up.

"I was cinching up my tie when the world began to shake. At first I was stunned and tried to think of some easy, everyday explanation for the crazy gyrations.

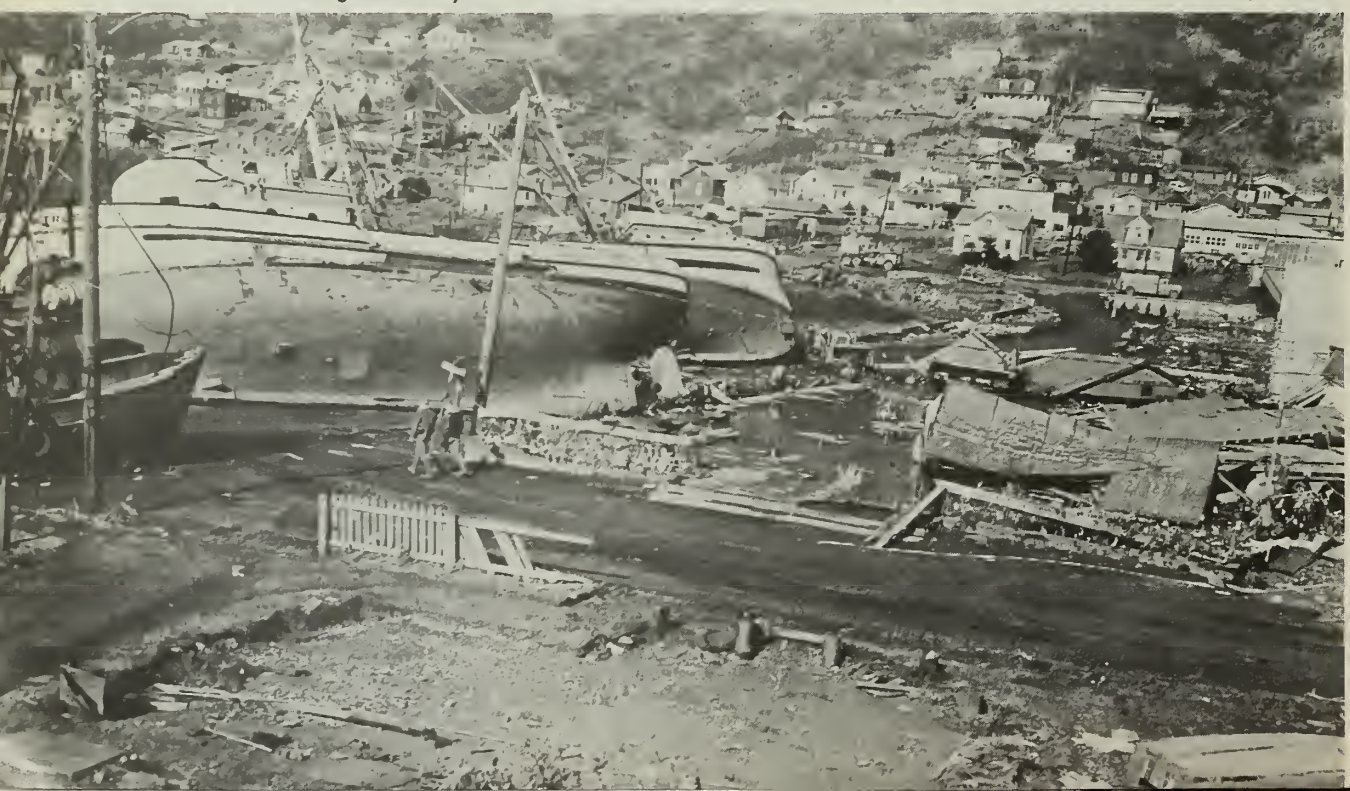
"I thought of the old washing machine downstairs which actually shakes the washroom during its spin cycle.

"When I realized what was happening – that we were experiencing a full-scale earthquake – I knew I had to get out of the building and into the open.

"The building sounded like a wooden match box being crushed underfoot. Every joint and brace was creaking and groaning under the strain. Light globes were falling from the ceiling, bottles were shaken from shelves and dressers, and mirrors crashed from the walls.

"Fortunately the building stood up as we all ran outside."

HIGH AND DRY—Fishing boats lay on their side where the tidal wave left them in the rubble of Kodiak, Alaska.



of Alaska's Earthquake

LTJG W. E. STEPP, also of VP 2, was having dinner when the tremors started. One of the officers at his table noted that it was "just another earthquake, which happens here all the time. Rarely anything serious."

As the tremors increased the tone of the conversation changed, and the officers moved outside.

"Everything was chaotic," recalled LTJG Stepp. "It was difficult to walk or even stand. With everything shaking the way it was we became dizzy.

"Buildings seemed to swing and jump up and down. Light poles swayed like saplings in a breeze Chimneys toppled. Landslides kicked up dust from the sides of surrounding hills. Cars and trucks were bouncing around as though they were on a trampoline."

At the VP 2 hangar area, aircraft bounced with all three wheels leaving the ground. A large paved ramp around the hangars cracked and buckled.

T. B. Newell ADR2, says he "didn't know which way to jump" after one of the cracks ran across the ramp and between his legs.

J. R. Bergman, AN, started to cross the hangar ramp, then turned and ran in the opposite direction as it buckled about 20 feet in front of him and a spout of water shot 10 feet into the air.

The earthquake lasted about four and a half minutes.

QUAKE DAMAGE to Alaska's Navy installations was relatively minor, but, elsewhere in the state, fires blazed out of control, buildings were leveled, and utility services were cut off.

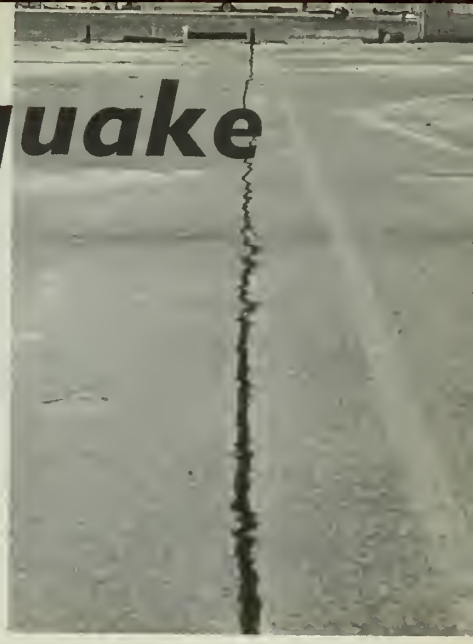
Most severely damaged was Anchorage, the state's largest city (population about 45,000). The center of the business district was left in ruins, and more than 100 homes were destroyed. Much of the city was torn by landslides. A 60-foot control tower at Anchorage airport collapsed. Thousands of feet of runway were torn up.

Then came the tidal waves which swooshed in and battered coastal communities along the Gulf of Alaska and down the coast of California.

At Kodiak, Randolph B. Boles, BMC, and LTJG Derald D. Schoon, rushed to Nyman's Peninsula to retrieve some Special Services funds that had been left in the bowling alley building during the confusion created by the earthquake. As they came running out of the building they noted that the water had risen approximately four feet; they did an about face and scrambled out the back door and up an incline to the top of a 35-foot knoll.

The men watched their cars bob in the water. The bowling alley ended up in shambles.

Victor E. La Porte, EOC, was en route to the Holiday Beach communications station to check out power failures when he noted the water rising rapidly along the waterfront. LaPorte abandoned his truck and literally ran for the hills to sit out the first tidal wave. When the water receded he returned to his truck and started back to the station proper. He didn't get far. More inshore waves forced him to abandon his truck once again – this time for higher ground on top of the station dump pile. LaPorte then walked back to the station the next morning—a distance of five miles.



SHOOK UP—Quake split this concrete runway apron and *(below)* wave left marginal pier like this.



GOING DOWN—Seabees of MCB 9 raze building damaged beyond repair.





SNOW JOB—Portable boilers set up by CBs provided hot water for homes.

BETWEEN TIDAL WAVES, A. L. Frisbie, PN1, and C. A. Foreman, AN, tried to return to the VP 2 hangar area to recover personnel records. En route, the third tidal wave of the evening splashed over the hood of their three-ton truck, stalled the engine and shoved the truck to the other side of the road. Frisbie and Foreman climbed to the top of the cab as water rushed into the truck, and ten minutes later plowed through waist-deep water to higher ground.

The surging waters around Nyman's Peninsula also forced William D. Maule, SN, and Bruce Reid, to swim for their lives. Maule and Reid had just finished making a security check when the waves splashed over them and their truck. "We tried to drive back but the water got too high and killed the engine. *Kodiak* (USS *Kodiak*, LSM 161) was just getting underway so we swam to her instead of the hills."

Five men inside the station power plant made it out of the darkness by tying themselves together with a life line and cutting their way through four feet of oil-covered water.

MORE THAN 100 persons were listed as dead or missing as a result of the earthquake and tidal waves.

Included in the death toll were the wife and stepchild of Kodiak-based Gordon L. Wallace, AO1, and the 12-year-old son of a public works employee. The three were drowned when their boat capsized 25 miles off the station. Wallace was washed ashore unconscious.

All other Navy personnel and dependents in Alaska were accounted for, with no fatalities or serious injuries.

However, five Navy families, two in the city of Kodiak and three on the naval station, were left homeless. They have since been relocated through efforts of Navy Relief, the naval station chaplain's office and the Red Cross.

The heart of the Kodiak business district, an area about three blocks long and three blocks inland, was destroyed by 35 feet of on-rushing water. The tidal wave carried large fishing boats a quarter of a mile inland, crushing buildings and left a soggy mess of debris. About half the city's waterfront fish-processing plants were wiped out.

Valdez, Alaska, was 80 per cent demolished, and in Seward the waves destroyed docks, a railroad yard, and considerable private property.

THE NAVAL STATION at Kodiak experienced seven-foot waves. Waterfront facilities were washed with sea water. Power plants were flooded. Ruptured fuel lines left sticky-coated flotsam littering the flooded station runway. Damage to three aircraft hangars was estimated at $1 million.

BEACHED BUOY — Large buoy at Kodiak harbor entrance wound up inland on the station's taxiway.



The major blow to the base was the temporary loss of power. The power plant was flooded repeatedly as tides remained six to eight feet above normal.

The road to the nearby communications station was washed out. Station cargo docks were partially floated loose and their approaches swept away.

Throughout the stricken area, hundreds of people were left to face 20-degree weather without shelter, heat or warm clothing.

DESPITE THE DAMAGE to their own facilities, Navymen at Kodiak did what they could to help the civilian community. Almost immediately after the quake struck, naval station personnel started aid to both the base and the city.

Many who were off duty that afternoon pitched in to direct traffic in Kodiak or patrol wrecked houses and boats that had been washed ashore.

The chaplain's office mobilized itself for "Operation Helping Hand." Navy tugs and *Kodiak* evacuated more than 250 Aleut Indians and natives to the naval station. An empty barracks was provided the evacuees, and Navy Relief supplied clothing, Mattresses, sleeping bags and blankets were turned over to those who needed them.

Seconds after the earthquake a disaster control alert was sounded at NAS Whidbey Island, Wash. Throughout the "lower 48" preparations got underway to assist in recovery operations.

Senator Ernest Gruening of Alaska returned home from Washington with a special representative of the President to confer with top Alaska-based military officials, including RADM Robert E. Riera, Commandant of the 17th Naval District and Commander, Alaskan Sea Frontier. Plans were made for military relief for victims.

LTJG Ken E. Brandenburg, CEC, USNR, was appointed the Kodiak naval station's liaison officer for the city's civil defense team.

Patrol Squadron Two was evacuated from Kodiak to make room for cleanup personnel who were to use

the station as an advance base.

A naval station public works crew installed two emergency generators in the galley, and more than 500 cooks and messcooks began working 'round the clock.

The MSTS tanker *Schuylkill*, (TAO 76), discharging petroleum at the naval station when the quake occurred, provided emergency power and steam to the activities ashore.

A continuous airlift of relief food and supplies and emergency equipment was set up at NAS Whidbey.

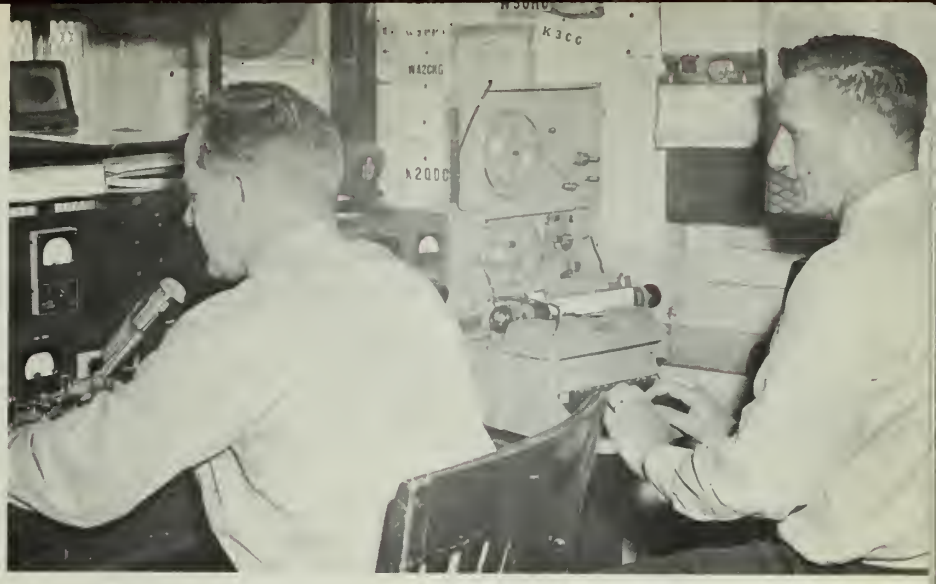
THE COMMANDER Fleet Air Whidbey, knowing that airfields are vulnerable to damage by earthquake, ordered Patrol Squadron 47, which flies seaplanes, to load tents, medical supplies, emergency food items, blankets and heavy clothing, in preparation for an emergency lift to coastal communities lacking airfields. Within three hours, Patrol 47 planes were loaded and ready to go.

Navy planes from Kodiak, Whidbey, Sand Point, and Moffett Field, began airlifting refugees out of the stricken area. Many aircraft maintenance crews, washed out of their hangars, were forced to keep their planes flying by working on them with little or no protection from the elements.

Civilian communities in the Pacific Northwest, many of which have close ties with cities in Alaska, marshalled their resources. The 250-plus refugees at Naval Sation Kodiak were promptly provided with emergency items (including dozens of disposable diapers), thanks to Seattle merchants and the Navy supply depots at Seattle and Oak Harbor.

Families with friends and relatives in Alaska began donating warm clothing and other appropriate items for movement. (Bellingham, Wash., came up with a full truckload of clothing in little more than a few hours.)

WHIDBEY ISLAND became the focal point for marshalling emergency supplies. Four turbo-prop P3A *Orion* antisubmarine planes of Patrol Squadrons 19 and 31 were moved to Whidbey from Moffett Field, Calif., and these, plus C-54 transports from Whidbey and NAS Alameda, began loading tents, blankets, heavy clothing, plasma, vaccine and other medical supplies and emergency equipment. Food and clothing were moved to Alaska before being requested.



MESSAGE MEN—Ham operators at Los Alamitos worked around the clock.

Transport planes were flown to Whidbey from as far away as Barber's Point, Hawaii, to participate in the airlift of emergency supplies and manpower.

After initial loads had been dispatched, calls came into Whidbey for special material of several types. A new pattern of requirements became apparent. The Whidbey supply officer, CAPT Dwight M. Botkin, was asked for 150 portable heating stoves — "right now."

"We didn't have them in stock, so they had to be purchased. It was late Saturday afternoon and most stores were closed.

"With the cooperation of Oak Harbor, Mount Vernon and Seattle merchants, we bought the stoves and had them loaded aboard aircraft within two hours."

Mobile generators, transformers and aircraft starting units were taken directly to Kodiak from Whidbey's support equipment shops. A complete portable water system with hoses, storage tanks and pumps was loaded at NAS Seattle and rushed to Alaska. Other airlifted material included chain saws, aircraft fuel contamination detectors, radio batteries and a special ship-to-shore power cable.

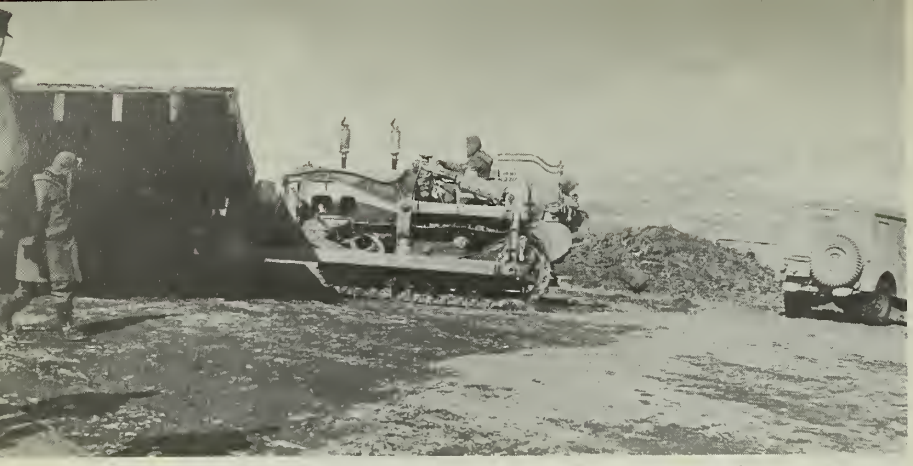
Outfitting plane crews, news reporters, and other Alaska-bound passengers with arctic clothing presented a special problem. About 100 newsmen and flight crewmen arrived at Whidbey wearing business suits of inappropriate lightweight flight clothing. All were outfitted before takeoff.

THE FIRST SHIP, civilian or military, to get underway in response to the emergency was USS *Salisbury Sound* (AV 13), a Whidbey-based seaplane tender. "*Sally Sound*" was en route to Alaska five hours after the earthquake struck, and only two hours after receiving orders to give support at the scene of the disaster.

Due to her rapid departure, the

SOME MESS—Photo shows part of devastation left by quake and tidal wave.





BIG JOB—Navy construction men move bridge to location during clean up.

AV left 250 crewmen behind on shore leave. Most were later flown to Alaska by Navy airlift, even though they were not told to return to their ship. Many voluntarily returned on hearing that their ship had sailed. Said one upon arriving at Whidbey: "When my ship sails, I go with her. Where do I catch a plane to Kodiak?"

Half an hour after arriving at Kodiak the AV's generators were linked to station power lines. The ship provided power equal to one-fourth the power capability of the beleaguered station power plant. *Sally Sound* was a floating support base. She provided water, took care of station laundry, and welcomed on board — for a hot shower and warm bunks — many tired mop-up workers who had been catching their winks in unheated barracks.

Working parties from the AV helped restore the main power plant, operated mobile power units, and assisted in the cleanup. They also helped station personnel control flight operations and repair the air control radar system.

Additional ship support was provided by USS *Alamo* (LSD 33). *Alamo* moved from San Diego to Kodiak with equipment and clothing for victims, and a 400-ton floating drydock to help rehabilitate the Kodiak fishing fleet.

USS *Noble* (APA 218) furnished two LCM type landing craft for use in the disaster area.

SEABEES ALSO played a major part in the recovery effort. A 150-man disaster recovery team from MCB Nine, homeported at Part Hueneme, Calif., was equipped and in the air, en route to Kodiak, less than six hours after receiving orders.

Arriving in Alaska in a light snowstorm, the Seabees rolled up their sleeves (figuratively) and went right to work. Electricians and utilities men got power, water and telephones back into service. Heavy equipment operators and builders worked on roads and waterfront damage.

Welders and pipefitters helped repair Kodiak's main seafood freezing plant. Crane operators helped clear the debris that littered the business district.

Steady pumping removed most of the salt water and oil that left a sticky coating over much of the station.

In nine days, working 12-hour shifts, the Seabees helped restore power, put up fences, built a road, installed three portable boilers, and repaired a pier in time for ship offloadings. The Seabees also assisted public works personnel with a myriad of projects, including equipment repair, boiler installation and cable laying for ship's power.

THROUGHOUT the emergency, communications facilities that were still operative became heavily taxed. Flight crew personnel used aircraft radios to transmit news. The commanding officer of VP-2 used aircraft radios while maintaining operational control of his squadron, throughout the Aleutian chain.

AID BY AIR—Patrol Squadron 47, NAS Whidbey Island, loads up with supplies for delivery to quake area.



Navymen helped offset a barrage of telephone calls which poured into Red Cross stations. For days, ham operators at Camp Pendleton and Los Alamitos, Calif., relayed messages from anxious friends and relatives of Alaska residents.

At Seattle, 11 Navymen volunteered to spend the week end at Red Cross headquarters to help relay queries. The men worked four straight days on a 12-on, 12-off watchbill. (Some worked more than 20 hours at a stretch.)

Seattle-based NRTC Navymen monitored amateur broadcasts from Alaska and relayed messages to the Military Radio System, which sent them throughout the U. S. More than 150 messages were relayed in this manner during one eight-hour period.

At NAS Los Alamitos, a team of seven Navy ham operators did what they could to ease anxieties. Working at the Naval Air Reserve Electronics Unit, the seven men spent 40 hours at their mike, serving as a "net control" between various points on the U. S. mainland and Alaska. A clear frequency was established on the day of the tragedy, and a steady flow of messages and calls kept going for five days.

AS THE MOP-UP of Alaska drew to a close, long-range rebuilding plans began to take shape, and engineers began working overtime.

A 15-man survey team representing the Bureau of Yards and Docks estimated the damage to Naval Station Kodiak at approximately $10.6 million. The Army and Air Force, with facilities in the heavily hit Anchorage area, fared much worse. Preliminary estimates indicated that millions would be needed to repair Army and Air Force facilities.

At last report, the recovery of Alaska had progressed "exceptionally well." The Seabee team has since deployed to Okinawa. Water and electrical systems are back in operation, and regular feeding hours have been resumed at the naval station galley.

Alaska has struggled a long way to her feet after a crushing one-two punch from nature.

—Dan Kasperick, JOC, USN



CHECKUP—Aviation electronics technicians repair electrical relay system.

Dash and Dam Neck

AFTER THE NAVY began FRAMming World War II destroyers, Navymen gradually became familiar with the word *Dash* (for Drone Anti-Submarine Helicopter).

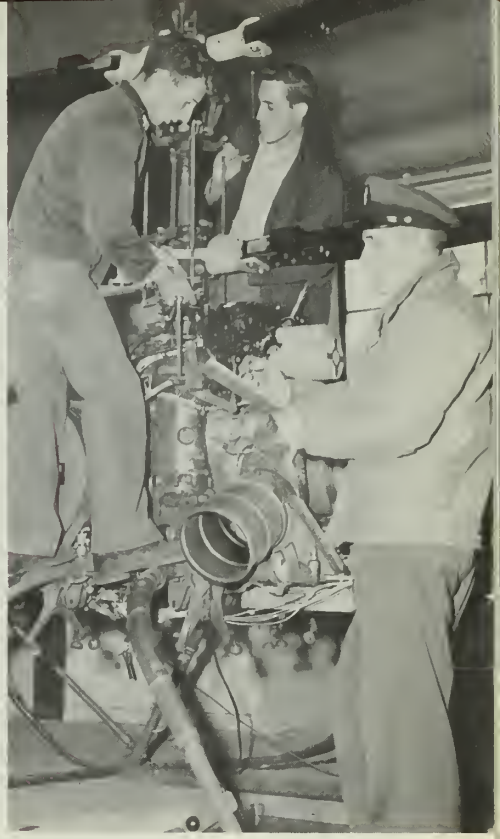
At NAS, Norfolk, or more specifically the U. S. Fleet Anti-Air Warfare Training Center at Dam Neck, Va. where *Dash* crews are trained for Atlantic duty, Utility Squadron 6 of Detachment II recently logged the 500th flight hour of its veteran drone No. 1039. During this lengthy airborne period, dependable old 1039 made more than 1000 successful landings.

Flight training for *Dash* got off the ground at Dam Neck in November 1962 but quickly had its wings clipped when all drones were grounded early the following year.

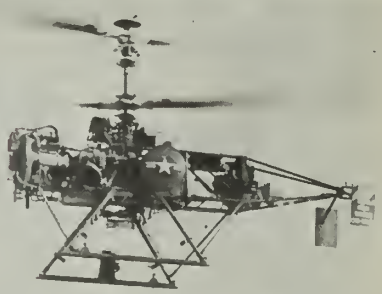
The pilotless choppers remained grounded for the first half of 1963 while electronic bugs were brushed out of the rotor controls by the Naval Air Test Center at Patuxent River, Md.

Since the Dam Neck training squadron has been in business, groundings notwithstanding, it has trained 36 officer controllers and 80 enlisted men.

The usual *Dash* crew is composed of an aviation jet mechanic, an aviation electronics technician, engineman, an electronics technician and an officer-in-charge. During operations on board ship, the crew also includes the combat information center officer. —Bill Weesner, JO1, USN

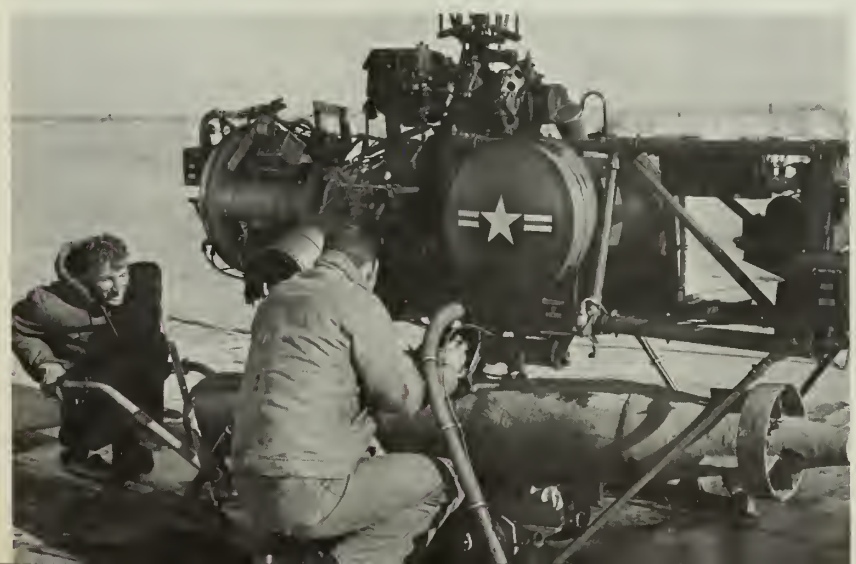


TEAMWORK—*Dash* crewmen make adjustments to rotors. *Below:* Trainee learns how to fly *Dash* using control box similar to that used aboard a DD.





PAY LOAD — Dummy torpedo is loaded aboard *Dash* in preparation for a training drop at Dam Neck, Va., where *Dash* crews train for Atlantic Fleet.





WATCH OUT—Officers of USS Haverfield look over the beach before landing.

A Tour of

Satawal, Puluwat, Pulap Lamotrek, Faraulep Gaferut, Ulithi and Pais—these are some names of remote and little-known ports of call of uss *Haverfield* (DER 393). As part of routine inspection operations in the U. S. Trust Territory, the Guam-based vessel recently traveled more than 2700 miles while visiting 16 Pacific island groups.

The surveillance is part of Commander Naval Forces Marianas' commitment to guarantee the security of an ocean area approximately the size of the United States.

Each visit follows a landing pattern which has evolved over the years. First the ship heads for an island, following (or occasionally correcting) existing charts.

When a predetermined drop-off point is reached, a landing party, consisting of officers, enlisted men and Marines, debarks into rubber life rafts. After a long, often wet, and sometimes difficult passage over the reef, the rafts reach the beach and the landing party scatters to inspect the island.

The landing officer confers with the island chief and various leading men to determine if Trust Teritory waters have been violated. The islanders provide information on ship and aircraft sightings, visitors and any major difficulties.

While the conference is going on, the ship's corpsman visits the island medical practitioner to offer help or advice as needed and technic-



HELPING HAND—Navy corpsman gives medical assistance to baby on Pulap. *Rt:* Natives attend church at Ifalik.





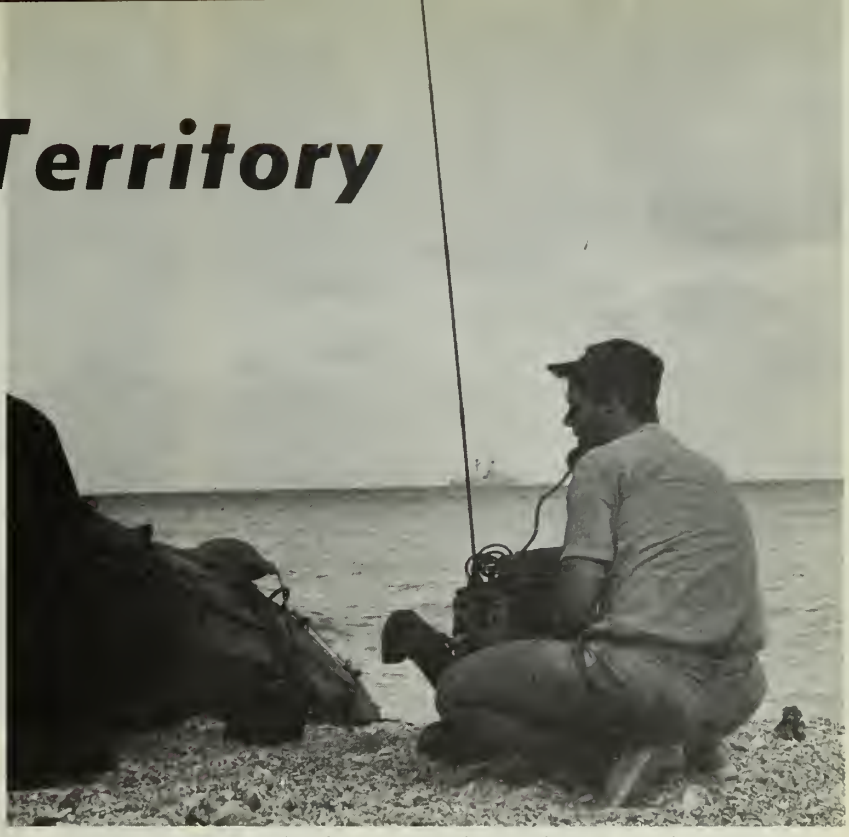
the Trust Territory

cal assistance is sometimes provided by other of the ship's personnel. *Haverfield* radiomen repaired a radio on one island, and on another forwarded a message to the district headquarters advising officials of a patient needing medical attention.

Extensive radar surveillance of the ocean areas is also a part of *Haverfield's* duties. This is to insure that there is no unauthorized activity in Trust Territory waters.

Each island creates its own distinctive impression on the Navymen. On Woleai some of the islanders venture out in their outriggers to greet the ship. On Pikelot and Gaferut, two isolated specks in the ocean, thousands of birds and tracks of giant turtles are the only sights to greet the eyes of visitors. The stone money of Yap, the huge outriggers of Satawal, and the mirror lagoon at Puluwat are just a few of the memorable and much photographed sights encountered.

A high point in *Haverfield's* recent surveillance tour was a visit to Koror, main island of the Palau group in the western Carolines. Palau is known for beautifully carved story boards, traditional dances and gracious hospitality.



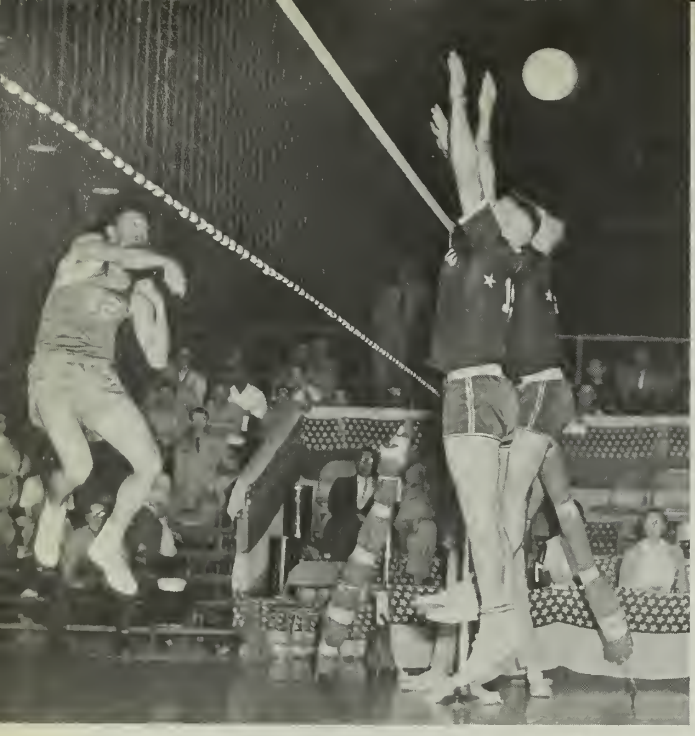
HELLO THERE—Crew member keeps in touch with ship during shore party landing.

There, sailors and Marines enjoyed a day of sightseeing and liberty. The local hospitality was demonstrated during an evening exhibition of songs and dances for the visitors. *Haverfield* reciprocated by inviting more than 200 students from the island's schools to tour the ship.

The Trust Territory of the Pacific islands consists of 96 atolls and islands, and includes the Caroline, Marshall and Mariana islands (excluding Guam), which were formerly under Japanese mandate. They are now administered by the U. S. Department of the Interior.

ISLAND TALK — *Haverfield* officer discusses island affairs with the chief of Ifalik during island surveillance.







COURT ACTION—South Atlantic champions *(left)* battle champs of Pacific Coast in All-Navy volleyball tournament.

All-Navy Sports Roundup

POWERFUL Pacific Coast swept through the 1964 All-Navy volleyball tournament with a perfect record of 16-0 to capture the title after four days of action on the court at NAS Memphis, Tenn. North Atlantic, 9-7, took the runner-up slot after defending champion, South Atlantic, 8-8, represented by Navy Memphis, was knocked out of contention by Western Pacific, 6-10. Atlantic Fleet was 1-15.

PacCoast started its winning ways by defeating LantFlt 15-6 and 15-2. NorLant defeated WestPac in two games 15-10 and 15-11.

SoLant won over NorLant 15-7 and 15-4, while the ever-hot PacCoast team took its third and fourth straight games 15-12 and 15-6 over WestPac.

SoLant stayed right on the heels of PacCoast by downing LantFlt 15-12 and 15-6.

Two action-packed games saw SoLant and PacCoast battling right down to the wire before PacCoast took both games by coming from behind 16-14 and 15-13. NorLant stayed in contention for the title by defeating LantFlt 15-9 and 15-11.

SoLant, down two games, tried to make a comeback, but a fired-up WestPac squad stopped them in the first game 15-6. This was WestPac's first victory of the tournament. SoLant came back in the second game 15-8.

PacCoast found it easy going as it defeated NorLant 14-4 and 15-2.

WestPac dropped LantFlt in the first game 15-11, but the losers fought back to a 15-11 win for themselves in the final.

Undefeated PacCoast continued its domination on the third day by defeating WestPac 15-3 and 15-8. SoLant, desperate to stay in the running, defeated LantFlt 15-11 and 15-6 in the afternoon and again whipped NorLant 15-4, but lost the return night game 15-13.

The unbeatable PacCoast defeated LantFlt 15-9 and 15-8, using their second string. In the final match of the evening, NorLant downed WestPac 15-13 and 15-13.

In the final day's action, WestPac defeated LantFlt 15-10 and 15-12; PacCoast beat NorLant 15-0 and 15-4; WestPac pulled two games out of the fire, defeating SoLant 17-15 and 15-13; and NorLant downed SoLant 15-6 and 15-9.

The tournament ended when PacCoast knocked SoLant out of second and into third place with 15-8 and 15-6 victories.

All-Navy Boxing

AFTER LOTS OF LEADING-UP action in many sections of the country, The All-Navy boxing titles have been handed out to the winners.

The tournament may have more than usual significance this time, because this is the year of the Olympic Games, to be held in Tokyo in October. The way is open for any who can qualify in the trials.

Following are the available results of regional competitions, plus the quarter-, semi-, and final results of the championships, which were held at Mare Island Naval Shipyard, Vallejo, Calif.:

North Atlantic

The sharply conditioned National Naval Medical Center boxing team from Bethesda, Md., captured eight of the nine bouts in the North Atlantic boxing championships to take eight individual titles and team honors. Six of the victories were scored by technical knockouts.

The only outsider to win was light - middleweight John Doughitt from NAS Lakehurst, with a TKO over Howard Freeman from uss *Warrington* in 1:35 of the second round.

The eight Medical Center boxers moved on to the All-Navy championships.

Defending All-Navy champs "O" "B" O'Bannon, Ralph Pelliccia and Richard Pettigrew headed Bethesda's victory march. O'Bannon stopped Ronald Dickson from Bos-

ton Naval Shipyard in 2:30 of the first round. In welterweight action Pelliccia finished Dick Olson, from NAS Brunswick, Maine, in two minutes of the second round. Pettigrew, All-Navy heavyweight champ, defeated Sam White in the opening round with a savage body attack. At 207 pounds, Pettigrew was in great condition.

In the lightweight bout between John Dixon, 1962 champ from Bethesda, and Ralph Handy, NAS Brunswick, both men went at it with spirit before Dixon scored a TKO in 2:20 of the second round.

John Bailey registered the first victory for Bethesda—a TKO over bantamweight E. P. Powers of Pax River in 1:30 of the second round.

Mickey Jones' win over Ray Wilson from USS *Constitution* was a dandy in the light-welterweight class. Jones decked Wilson four times—all by rights—before he was declared the winner on a TKO in 2:22 of the second round.

The first bout to go the distance was the 178-lb. clash between Charlie Theobold and Sylvester Crawford from USS *Warrington*. Theobold chalked up another for NNMC.

Jesse Joyner racked up the eighth NNMC victory by outpointing Richard Groccia from Davisville, R.I., for the middleweight title.

Atlantic Fleet

Nearly 2000 spectators watched the Atlantic Fleet boxing tournament semi-finals at Little Creek, Va.,

PACIFIC COAST'S Jim Rosette held on to 178-pound championship and is scheduled to fight in Olympics.





ALL-NAVY volleyball champions of 1964, the Pacific Coast Invaders, won all of their tournament games.

in which light-welterweight Malachi Thomas from USS *Orion* scored a TKO over Marine Earl Guy, Landing Force Training Unit; welterweight Witt Whitson from USS *Northampton* KO'd Dwight Bolt, USS *Wright;* Jim Finley from Seal Team Two stopped Pete Chimienti, USS *Wright* in a light-heavy contest; and heavyweights Willie Jenkins, USS *Arneb*, and Marine Jim White, USS *Northampton*, battled to the last bell for a unanimous decision that went to Jenkins.

In the final bout, heavyweights Jim McMillan, USS *Wright*, and Dave Zyglewicz, USS *Taconic*, lost no time mixing things up as they answered the bell. McMillan stung Zyglewicz with a hard right early in the round, after which the *Taconic* sailor dashed in with a flurry of punches. But he ran into a solid right hook that sent him down.

He bounced up immediately, but referee Paddy Mills signaled a knockdown and Zyglewicz waited out the mandatory eight count. McMillan played the possum game for most of the round—covering up, then springing back to score heavily until Zyglewicz, reversing the trend, moved in with a series of hooks that sent McMillan to the canvas at the bell.

Round two began as furiously as the first, both men throwing hooks and crosses until a right jab signaled the end for McMillan. Staggered in a neutral corner, he took a hard right cross that dropped him to the canvas for a KO in 25 seconds of the final round.

In the LantFlt finals, nine Atlantic Fleet boxing champions emerged after three days of rugged competition. Five of the champions were from the Amphibious Force, and one each came from Submarine Force, Naval Air Force, Cruiser-Destroyer Force and Atlantic Fleet headquarters. The winners represented LantFlt in the All-Navy tournament.

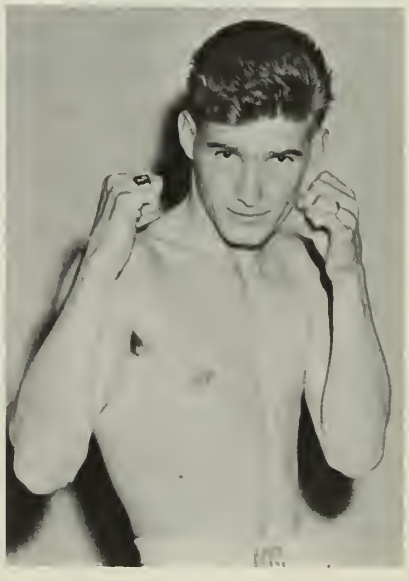
The final bouts of the tournament were highlighted by the guest appearance of former world middleweight champion Tony Zale.

Amphibious Force winners were middleweight Marine Oliver Henry, from Landing Force Training Unit, who scored a TKO over Wally Stevens from USS *Sierra;* light-heavyweight Bobby Sidney from USS *Taconic*, who KO'ed Willie Jenkins from USS *Arneb;* and bantamweight Liwanag Ortiz from USS *Okinawa* and Marine lightweight Clyde Clark from Landing Force Training Unit, who were uncontested champions.

Other winners were light-middleweight Doug Amicone from Fighter Squadron 43 by a unanimous decision over Willie Adams, USS *Okinawa;* light welterweight Malachi Thomas from USS *Orion* by a TKO over John Ecdlango from Service Force, Atlantic; and welterweight Witt Whitson from USS *Northampton* by a TKO over Troy Vaught, Underwater Demolition Team 22. Flyweight John Mayo from Atlantic Fleet headquarters was also an uncontested champion.

Amicone, Virginia light-middleweight Golden Gloves champion, had trouble winning his second Atlantic Fleet title. Adams took an early lead by landing some hard rights to Amicone's head, but Amicone rallied in the final two rounds, catching Adams repeatedly with stinging lefts.

BANTAMWEIGHT Roy DeFillipis from Pacific Coast successfully defended 119-pound title won last year.







ATLANTIC FLEET boxers battle for championships at Little Creek, Va., a big step on the way to All-Navy tournament.

Thomas, Whitson, Henry and Sidney had little trouble gaining their titles. All four men recorded knockouts in less than two rounds. Thomas had the fastest KO of the evening, disposing of Ecdlango in 55 seconds of the first round.

South Atlantic

Results:

112 lb – DeVault, NAS Corpus Christi had no contender.

119 lb–Clark, NAS Corpus Christi had no contender.

132 lb – Johnson, NAS Corpus Christi defeated Payton from Sixth ND.

139 lb–Malphars, NAS Memphis defeated Vangen, Eighth ND.

147 lb–Miller, VT-29, had no contender.

156 lb – Linden, USNH Corpus Christi, defeated Pearo, Sixth ND, in 1:50 of the third round by TKO.

165 lb – Thompson, VT-31, defeated Flowers, Sixth ND.

178 lb – Newbill, NAS Sanford, had no contender.

Heavyweight–Melancon, of NAS Memphis, had no contender.

All winners represented SoLant in the All-Navy tournament.

All-Navy Results

Quarter finals:

112 lb – William Burr, NavSta Pearl Harbor (WestPac) won unanimous decision over Richard DeVault, USNH Corpus Christi (SoLant); Joe Gaiter, NAAS Ream Field Calif. (PacCoast), won split decision over John Bailey, NNMC Bethesda (NorLant).

119 lb–Don Clark, NAS Corpus Christi (SoLant), won split decision over John Mayo, CINCLant Flag (LantFlt).

125 lb – "O" "B" O'Bannon, NNMC Bethesda (NorLant), won TKO in 2:53 of the third round over Liwanag Ortiz, uss *Okinawa* (LantFlt); Derrick Hill, Treasure Island (PacCoast), won a unanimous decision over Walter Swan, uss *Tom Green* (WestPac).

132 lb–Robert Valdez, uss *Prairie* (WestPac), won by a KO in 2:23 of the first round over Charles Clark, uss *York County*.

139 lb–Mickey Jones, NNMC Bethesda (NorLant), won by a unanimous decision over Robert Newton, NAAS Ream Field (PacCoast).

147 lb–Jim Miller, VT-29 (SoLant), won a unanimous decision over Ioane Tufele, uss *Westchester County* (WestPac).

156 lb–Mike Lyndon, USNH Corpus Christi (SoLant), won a unanimous decision over John Doughitt (NorLant).

165 lb–Oliver Henry, LFTU (LantFlt), won by a KO in 2:15 of the second round over Paul Thompson, VT-31 (SoLant).

178 lb–Larry High, uss *Bayfield* (WestPac), won by a KO in 2:58 of the second round over Andy Newbill, VAH-5 (SoLant).

Heavyweight – Dave Zyglewicz, uss *Taconic* (LantFlt) won a unanimous decision over Mike Melancon, NATTC, Memphis (SoLant).

Semi-finals:

132 lb–Robert Valdez (WestPac) won a split decision over last year's champion Fernando Trujillo (PacCoast); John Dixon (NorLant) won a unanimous decision over Joe Johnson (SoLant).

139 lb–Mickey Jones (NorLant) won a unanimous decision over Malachi Thomas (LantFlt); Alvin Bradley (WestPac) scored a TKO victory in 2:51 of the first round over Ray Malphars (SoLant).

147 lb–Ralph Pellicia (NorLant) scored a TKO victory in 1:30 of the third round over Jim Miller (SoLant); Randy Weddle (PacCoast) won by a KO in 1:44 of the second over Lorenzo Whison (LantFlt).

165 lb–Oliver Henry (LantFlt) won by a unanimous decision over Jesse Joyner (NorLant); Bobby Brown (PacCoast) won a split decision over Terry Edison (WestPac).

178 lb–Jim Rosette (PacCoast) won by a TKO over Larry High (WestPac); Bobby Sidney (LantFlt) won a unanimous decision over Charlie Theobold (NorLant).

Heavyweight – Dave Zyglewicz

'64 Navy Boxing Champions

Flyweight–Joe Gaiter
Bantamweight–Roy DeFillipis
Featherweight–Derrick Hill
Lightweight–Robert Valdez
Light-welterweight–Mickey Jones
Welterweight–Ralph Pelliccia
Light-middleweight–Doug Amicone
Middleweight–Oliver Henry
Light-heavy–Jim Rosette
Heavyweight–Richard Pettigrew

(LantFlt) won a unanimous decision over Jim Haskins (PacCoast); Dick Pettigrew (NorLant) won by a TKO in 1:24 of the first round over Earl Johnson (WestPac).

Finals:

Glee for some, heartbreak for others, and plenty of good boxing marked this year's All-Navy championship finals. Four of last year's champs went all the way to repeat their feats. Two Marines were victorious.

After a couple of last year's champs were knocked out of competition on the way up the pyramid, two more who made it to the finals were dethroned. They are William Burr (WestPac), last year's flyweight champ, who lost on a unanimous decision awarded to Joe Gaiter (PacCoast); and "O" "B" O'Bannon (NorLant), featherweight, who couldn't quite squeeze past Derrick Hill (PacCoast).

Dave Zyglewicz (LantFlt), savoring a strong taste of victory as the finals approached, did not have an opportunity to test his skill against last year's heavyweight champ Dick Pettigrew (NorLant) as he lost the match on a medical default.

The results:

112 lb—Joe Gaiter (PacCoast) won a unanimous decision over William Burr (WestPac).

119 lb—Roy DeFillipis (PacCoast) won a unanimous decision over Don Clark (SoLant).

125 lb—Derrick Hill (Marine—PacCoast) won a split decision over "O" "B" O'Bannon (NorLant).

132 lb—Robert Valdez (WestPac) won a unanimous decision over John Dixon (NorLant).

139 lb—Mickey Jones (NorLant) won by a TKO in 53 seconds of the second round over Al Bradley (WestPac).

147 lb—Ralph Pelliccia (NorLant) won by a TKO in 2:48 of the second round over Randy Weddle (PacCoast).

156 lb—Doug Amicone (LantFlt) won a unanimous decision over Mike Lyndon (SoLant).

165 lb—Oliver Henry (Marine—LantFlt) won a unanimous decision over Bobby Brown (PacCoast).

178 lb—Jim Rosette (PacCoast) won by a KO in 2:10 of the first round over Bobby Sidney (LantFlt).

Heavyweight — Dick Pettigrew (NorLant) won by default (medical) over Dave Zyglewicz (LantFlt).

—Bill Howard, JO1, USN

SIDELINE STRATEGY

WILL ANYONE in the COMFAIRNORFOLK and NAS Oceana commands who can beat VU-4 in the admiral's cup competition please step forward?

The invitation is open to all Atlantic Fleet aviation units in the area, including carriers homeported at NOB Norfolk, and to all squadrons and aviation support units stationed in Norfolk, Oceana and Lakehurst.

Surely some formidable competition can be mustered from such a large area. At least good enough, it would be hoped, to beat teams from a small outfit which has 35 of its members detached to Florida.

Until this challenge is answered, the Oceana-based utility squadron hereby serves notice that it will continue to take the league and station championships in softball and football—as it did in 1963—even bettering (if that's possible) its 22-won, none lost football record posted last season.

Besides being last year's admiral's cup winner, VU-4 has the 1963, '62 and '61 captain's cups to prove that it means business.

★ ★ ★

Item of interest in the *Gitmo Review*, weekly station paper in Guantanamo: Next to a picture of former ALL HANDer Jerry McConnell (wearing a Beatle wig) was a story about Chief Youmans and his red snapper. It was a whopper—Youmans caught a big one with a little one. Using small red snappers as bait on a 5-inch hook, he hauled in what should be a world record-breaking daddy snapper weighing 61 pounds. The existing record was about 55 pounds.

★ ★ ★

From the West Coast we have a report that VP-19 lost an ADR3 and the Washington Huskies gained a halfback. Berry Carter (6 feet, 1 inch; 198 lbs.), two-year star of Moffett Field's grid and district championship softball teams, was awarded a full four-year football scholarship to the University of Washington in Seattle.



Carter attended Manassas High School in Memphis, Tenn., before serving his recently expired stint in the Navy, and was named to the All City football team two consecutive years besides lettering in baseball, swimming and boxing.

★ ★ ★

Woody Woodpecker, that clownish little heh-heh-heh-HA-heh comic book and cartoon creation of Walter Lantz, will soon make his debut on the Navy sports scene. Woody's creator has authorized a certain ship in the Pacific Fleet to use him on such things as athletic uniforms, ship's patches, ashtrays and the like. Woody will soon make his first appearance on the teams' jerseys at bowling and softball games.

Wondering which ship has been so honored? USS *Woodpecker* (MSC 209), of course.

LETTERS TO THE EDITOR

Permissive Orders

SIR: I looked up an ALL HANDS article (printed in 1962) which stated that a man may be ordered for separation anywhere if he makes a formal written statement to the Chief of Naval Personnel that the place he designates will be his final home of selection for retirement.

Our chief personnelman says this has been discontinued, but can't find any reference to back up his belief.

Can you tell me whether or not there has been a change in this procedure?—R. L. P., SH1, USN.

• *There was a time when the Chief of Naval Personnel did authorize transfers of this kind, but there were complications.*

To justify the orders, the Bureau had to ensure that the cost of such a transfer wouldn't exceed the amount to which the man would be entitled under the standard procedure of transfer to the Fleet Reserve. If the Bureau did this, the transfers were authorized on the permissive condition that the individual concerned would pre-select his "home of selection".

The ax fell when the Comptroller General ruled that transferring Fleet Reserve personnel to a separation activity of their choice under permissive conditions deprived the individuals of all basic entitlements due under directive type orders.

To preclude the possibility of pay checkages as a result of permissive orders, the idea was dropped.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D. C. 20370.

One Letter Tells the Complete Story

SIR: Our ship recently won the battle efficiency "E", and our communications division was awarded the green "C" for excellence.

Many of the men in communications would like to wear the green "C" sleeve patch. They claim the insignia is cricket, and point out that several other ships in the area allow their men to wear the "C". The patch is also sold by local tailors.

I say the "C" may not be legally worn. *U. S. Navy Uniform Regulations* authorizes the "E" for wear, but it doesn't answer our question about the "C".

Is the "C" authorized?—V. R. F., RMCS, USN.

• *No. The "C" may not be worn on the uniform.*

But we do agree with you on one point—in a negative sort of way. The answer to your question is in "Uniform Regs." If it's not listed, it's not authorized.

It's easy to understand why the men in your communications gang would be proud of their accomplishments, and want to wear the "C". But let's remember that they are authorized to wear the "E", and without their skill your ship would probably never have earned it.

The Uniform Board has considered requests for the authorization of such items as the green "C", white "A", black "M", plus white, green, red and yellow "E's", but the board disapproved each in favor of the old tradition that the Navy uniform should be clean and uncluttered.

You must admit it does look better that way.—ED.

Saratoga's *Eight-Inchers*

SIR: I remember reading, years ago, an *All Hands* article which said the old USS *Saratoga* (CV 3) once carried eight-inch guns.

Unfortunately, I only remembered enough to maneuver myself into an argument but not enough to talk my way out again. My opponent claims the guns were installed during the building process but were removed before *Saratoga* was launched.

I, on the other hand, remember reading that the old carrier kept her eight-inch guns for a number of years after her commissioning — but I certainly can't prove it. I don't remember the date of the article, and *Jane's Fighting Ships* (1942) doesn't help.

So what's the story? I quoted *All Hands* as my source — can you bail me out? — F. V. T. W., LT (JG), USN.

• *Happy to oblige.*

Saratoga, *one of the Navy's earlier carriers, was originally laid down as a battle cruiser in 1920. She probably would have been launched as a cruiser, had negotiations for the Washington Treaty not stopped her construction.*

The Washington Treaty of 1922, finally signed by the world's major sea powers of the era (British Empire, France, Japan and the U. S.), limited the total capital ship tonnage of the U. S. to 525,000 tons.

When she signed the treaty, the U. S. agreed to dispose of those capital ships then under construction and in excess of the limitations. The cruiser in question was in excess.

However, aircraft carriers were not considered capital ships, and the U. S. Fleet was short of the 135,000 tons allowed for flattops. And, under one of the provisions of the treaty, the U. S. could legally convert two of her partially built cruisers to aircraft carriers.

Saratoga, *of course, was one of these.*

SHOW ON DECK—USS *Topeka* (CLG 8), at Long Beach Naval Base, hosts pipes and dancers of the Anderson Highlanders from Lakewood, Calif.



The other was USS Lexington *(CV 2).*

Because the hulls were designed for battle cruisers, the carriers retained many features more common to cruisers: armored hulls, eight 8-inch/55-caliber breech-loading rifles in four twin mounts and four 21-inch single above-water torpedo tubes.

Saratoga *carried this armament from her launching in 1925 until the late 1930s when, during modernization, they were removed. The eight-inchers were replaced with 16 5-inch/38 caliber dual-purpose guns, plus 40-mm and 20-mm antiaircraft batteries.*

Saratoga *kept her armored hull, of course. The heavy, re-enforced sides, uncommon for a carrier, came in very handy in 1942. Twice that year, in incidents about seven months apart, she was torpedoed by Japanese submarines.*

Between her first and second tangles with subs, her aircraft sank the Japanese carrier Ryujo *and heavily damaged the seaplane carrier* Chitose. *After repairs in Pearl Harbor following the August 1942 torpedoing,* Saratoga *participated in strikes against Sabang, Sumatra; and Surabaja, Java. In 1945 she joined Admiral Mitscher's Task Force 58 for the first carrier aircraft strike on Tokyo and the invasion of Iwo Jima two days later.*

In an engagement following the Iwo Jima invasion, she was hit by four suicide planes and seven bombs. She made Eniwetok with heavy casualties and, still fighting to bring fires under control. Although she survived, she did not fight again.

Saratoga *was finally sunk at Bikini, during the 1946 A-bomb tests. She had been commissioned almost 19 years.* —ED.

Warrants Were on the Settle Board

SIR: Some comments regarding your report on the Settle Board recommendations (ALL HANDS, April 1964). I have completed 23 years' active service, 12 of them as a warrant officer. I'm sure that most warrant officers, like myself, are pleased to note that their program is to be reactivated.

I also feel, however, that remaining WOs could have offered many constructive suggestions for the Settle Board to consider. For example:

- Discontinue the use of specialty indicators such as CHELECTECH, ELECT, SURFORDTECH, etc. These are cumbersome, often misunderstood or misspelled, and unnecessary. The numerical designator should be enough to indicate the warrant's specialty.
- Change the title "Chief Warrant Officer" to "Senior Warrant Officer" or just plain "Warrant Officer." W-1s could be called "Junior Warrant Officer." An introduction to civilians as "Chief Warrant Officer So-and-So" usually results in his being addressed as "Chief."—R. H. C., CWO-3, USN.



PACKS A PUNCH—USS Cochrane (DDG 21) is armed with Tartar missiles, Asroc ASW rockets and 5-inch guns. She joined the Fleet just this spring.

- *Warrant officers did offer many constructive suggestions for the Settle Board to consider. WOs and former WOs sat as Settle Board members. Others appeared before the board to air their views. Still others corresponded with the board, or were contacted for comment.*

Not all warrant officers, however, were heard from. But those who were made a number of suggestions quite similar to yours. These were discussed but, for various reasons were not included in the recommendations sent to the Secretary of the Navy.

Like you, we were glad to see that one big recommendation—for reactivating the WO program.—ED.

An Official Motto for the Sea Service?

SIR: What is the official motto of the Navy? The question arose here recently and, so far, no one—including the officers and chiefs attached to *Constellation*—has been able to provide a definite answer. But everyone thinks there must be one.—M. E. H., EM1.

- *You have problems because the Navy does not have a motto. According to the Naval History Division, there never has been an official motto. The first Navy seal carried the words "Sustenans et Sustentatum"—which may be translated loosely as "sustaining and having sustained"—but this was not an official motto.*

Your query has given us pause for thought on the subject. Why doesn't the Navy have a motto? A motto can serve a two-fold purpose: properly conceived, it describes the general principles or precepts on which an organization is based. If the actions and accomplishments of the organization as a whole can be identified with this description, the motto gains a manifest historical significance which can serve as an inspiration to present and prospective members of the organization

Among the examples which come to mind, the Marines are noted around the world as being "Semper Fidelis;" the Coast Guard is "Semper Paratus;" and the motto "E Pluribus Unum" on our coins serves as a constant reminder that the United States is a country formed by making "one out of many."

Now, we're not advocating that the Navy go on port and starboard watch until someone hastily cooks up a motto. We pose the question merely to propose an answer.

If "Sustenans et Sustentatum" was, by any chance, introduced by someone with a view toward its possible adoption as an official Navy motto, the tongue-twisting qualities of this phrase probably were responsible for its eventual trek to obscurity.

In addition, "sustaining and having sustained" is a rather vague statement and hardly contains any inspirational punch—it doesn't have the desired ring to it. Nor does it amply describe the Navy's multifarious missions and capabilities; nor does it sufficiently convey overtones of the character make-up of Navymen.

Possibly in this year and age of slogans, someone can suggest a more fitting motto which could be used, should the Navy ever consider adopting one.—ED.

Sure, You Can See Your Records

SIR: I work in an officers' records section and am often asked where an officer should get permission to review his previous fitness reports.

Although I have searched available publications and directives, I have found no information on the subject.

Can you tell me whether or not officers can review previous fitness reports? If so, how and by what authority? — F. T., YN1, USN.

• *A officer or his representative (if designated in writing), may review his past fitness reports (and other personnel records) at Room 3057, Arlington Annex of the Navy Department, Arlington, Va.*

This is the location of the Bureau of Naval Personnel's Officer Review Room. About 20,000 officers review their records here each year.

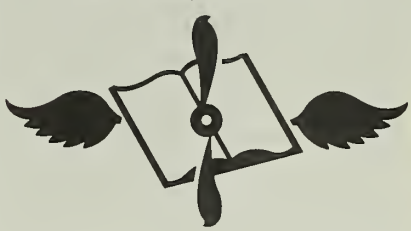
The "BuPers Manual" (Article B-2201 (3)) tells you all about it. — ED.

Rating Badge New From A to Z

SIR: Whatever happened to the new AZ rating badge? The aviation maintenance administrationman rating has been in effect since 1 January, and was no doubt in planning stages long before that. I know of some 60 AZ "A" school graduates in the Fleet already who would be proud to wear a striker's badge—if they could find one. Now, with the February 1964 exam results out, and the August exams not far off, many new AZ3s will be petty officers for pay purposes only.

Civilian uniform shops are prepared to sell the design which was made public a few months back, but can't do so until it is authorized. Our base's clothing and small stores doesn't even have a stock number for the new badge.

The absence of official word on the subject is creating some awkward situations for the AZs involved, and is breeding a variety of rumors.



When will the badges be available? Are changes to the published design being contemplated? — J. R. S., AZ1, USN.

• *In response to your last two questions, AZ rating badges will be available soon, if they aren't on your small stores shelf already, and no changes to the published design (see cut) have been made.*

As for the delay in issuance of AZ badges, it's the old story of introducing a new insignia item into the supply system—which usually requires six to nine months' lead time. This allows for development of an adaptable machine design for mass production of the approved drawing, which insures standard, identical badges. Then consider contract negotiations, commercial manufacturing schedules, shipping and Navy-wide distribution, and the months have slipped away.—ED.

GOOD RECORD—TRARON-28 *Trackers* fly over Corpus Christi T-heads. The training squadron completed 365 days and 30,363 hours without accident.



Officer Mess Inspection

SIR: I've noticed during various shipboard administrative inspections over the years that the Navy does not have a checkoff list for officers' messes. I believe that an administrative checkoff list, containing standard mess inspection points indicated below, would improve the operation of officers' messes and make them more uniform in function.

(a) Procedures for mess treasurer and caterer.

(b) Adequate control for the mess, SandA form 338 (or similar form).

(c) Education and training for stewards.

(d) Stock and storeroom control.

(e) Responsibility card (SandA 306) for mess equipment.

(f) Enlisted men organization chart.

(g) Purchase form for outside purchases (NavCompt 739).

(h) Commissary price list.

(i) Civilian vendor price list.

(j) Appearance of wardroom.

(k) Orderliness of staterooms.

(l) Timing and proficiency in service.

(m) Condition of china and silverware.

(n) Table linen.

(o) Cleanliness and neatness of personnel.

(p) Balance of menu.

(q) Reading materials.

(r) Administration of Officers' Messes (NavPers 10849-A).

(s) The Wardroom (NavPers 10002).

(t) U. S. Navy Regulations, 1948.

(u) Applied Cookery (NavSandA P-227).

(v) Sanitary precautions for food service personnel.

(w) Meat Handbook (NavSandA P-55).

(x) Navy Recipe Service (NavSandA P-7).

(y) Bakery Handbook (NavSandA P-342).

(z) Steward 1 & C; Steward 3 & 2 (Training courses).

—W. H. H., SDC, USN.

• *You have plenty of support in your contention that wardroom messes afloat have not received the attention they deserved during administrative inspection tours, and have been somewhat lacking in uniformity of operation.*

In recent times, steps have been taken to do something about it. As of June 1963, the "Accounting Handbook for Nonappropriated Funds" (NavExos P-2409), contains instructions concerning afloat mess operation. As of 1 Oct 1963, supply officers assigned to certain major ships have been attending (at Pax River, Md.) a four-week course of instruction devoted to their wardroom messes.

There also have been some changes in the publications you recommended. For example:

• *Your (e) — Responsibility Card*

(SandA 306) for mess equipment is now designated as Equipage Stock Card and Custody Card (SandA 306-A).

• *The publication "Administration of Officers' Messes" (NavPers 10849-A) which you recommended under (r) is now out of print and obsolete.*

• *"Sanitary Precautions for Food Service Personnel" (your reference (v)) is NavPers 91921-A.*

• *Your reference (w) "Meat Handbook" (NavSandA P-55) is out of print. BuSandA is going exclusively to "pack."*

• *If you don't mind a bit of hair-splitting, your reference (x) "Navy Recipe Service" (NavSandA P-7) is, technically, "Navy and Marine Corps Recipe Service" (NavSandA P-7).*

In spite of these minor nits we have managed to pick, the people at the Bureau like your suggestions.—Ed.



A CONTRACT has been awarded for development of new A7A attack aircraft, shown in artist's concept, scheduled to replace A4E Skyhawk.

Ormsby's Career Lively, Laudable

Sir: What ever happened to uss *Ormsby* (APA 49)? I was assigned to *Ormsby* in 1943 shortly after she was commissioned. I was on board when she participated in the Gilbert Islands operations, but was transferred to another ship that same year. What other operations did *Ormsby* take part in? Where is she now?—T. M. F., Hyattsville, Md.

• *Briefly,* Ormsby *was a busy ship during the two years she remained in service after you last saw her. From Tarawa to Leyte Gulf she moved thousands of men to and from various front lines and earned for herself a number of service medals and battle stars. In May 1946 she was transferred to the War Shipping Administration for disposal.*

Now at our disposal 17 years later, is Ormsby's *written history, which makes it clear that during little more than two years of wartime Pacific operations she did, indeed, get around, and that her career, though relatively short-lived, was lively and laudable.*

Ormsby *was actually a C-2 type merchant ship converted to the attack transport category for wartime service. She was commissioned in June 1943 at San Francisco, and wasted no time in getting underway.*

In August 1943 she was loaded with troops and cargo at San Diego, then moved into the Pacific area, stopping at Pearl Harbor, the Ellice Islands, Pago Pago, New Zealand, and Efate, then landed Marines at Tarawa in the Gilbert Islands during that historic battle of 20 Nov 1943.

Ormsby *returned to Pearl Harbor in December, took on Army troops for amphibious warfare training, then landed them at Kwajalein on 31 Jan 1944.*

From Kwaj Ormsby *moved on to Guadalcanal where she trained more Army units, then landed reinforcements for the action at Bougainville on 28 March.*

April 1944 was New Guinea month for Ormsby. *She had stops at Milne Bay, Buna, Finschhafen, and Aitape, where she landed assault troops.*

Returning to Guadalcanal, Ormsby *loaded Marines of the First Provisional Marine Brigade and trained them in landing operations. On 21 July she landed these troops at Guam. While at Guam* Ormsby *suffered her only casualties of the war: Two men were killed when a 3-inch shell hit her forward resistor room.*

From Guam Ormsby *went to the New Hebrides for maintenance, then again returned to Guadalcanal to embark men of the First Marine Division. She landed these troops at the Palau Islands in mid-September, then proceeded to Hollandia and took on an Army unit for the Philippines, landing them at Leyte on 20 October. A reinforcement run to Leyte followed on 14 November, by way of Manus, Hollandia, and Morotai.*

That month Ormsby *returned to the U. S. for a breather in the form of an overhaul at San Pedro, Calif. Out of the yards in March 1945, she loaded up with Seabees at Port Hueneme and moved them to Guam. She returned to San Francisco on 5 May, then steamed to Seattle.*

Another voyage to Guam followed and, before returning to San Francisco in July, she stopped at Tinian and Saipan.

In August Ormsby *moved a load of Army personnel to Manila; the following month dropped anchor in Tokyo Bay. Also in September she moved to Guam where she took on more than 1000 Marines, then steamed to Tsingtao, Shantung Province, China, for the occupation landings.*

In October she returned to Manila Bay, and the following month went to Haiphong, French Indo-China, where she took on exactly 1737 Chinese Army men. She then moved on to Formosa for the landing of Chinese occupation forces. From there, Ormsby *moved to Okinawa to pick up 1872 Army men for return to the U. S.*

In May 1946, uss Ormsby *was transferred to the War Shipping Administration for disposal by sale.*

In all, she had earned six battle stars on the Asiatic-Pacific Area Service Medal for the roles she played in the following operations:

Gilbert Islands—20-29 Nov 1943

Marshall Islands—31 Jan—4 Feb 1944

Hollandia—21-27 Apr and 1-5 May 1944

Marianas Islands—21-25 Jul 1944

Western Caroline Islands—6 Sep-14 Oct 1944

Leyte—13-25 Oct and 14 Nov 1944

Ormsby *also earned the Navy Occupation and China Service Medals.*

We're glad you didn't ask how many miles Ormsby *steamed in the course of all this. Our adding machine broke down somewhere between Pago Pago and Efate in the South Pacific.*—Ed.

Take It Easy

Sir: I understand All Hands recently contained an article on isometrics.

My husband is a cardiac patient and unable to take strenuous physical exercises. Perhaps isometrics would be excellent for him. May I have a copy of the issue in question?—K. E. S.

• *We are sending you a copy of our June 1963 issue. The nine isometric exercises are described on page 43.*

You should remember, however, that the Navy suggested the exercises for men who possess relatively good health. Before your husband gives the system a try, he definitely should obtain his doctor's permission.—Ed.

Ship Reunions

News of reunians of ships and arganizotions will be carried in this column from time to time. In plonning o reunion, best results will be obtained by notifying the Editar, ALL HANDS Magazine, Room 1809, Bureou of Naval Persannel, Navy Deportment, Woshingtan, D. C. 20370, four months in advance.

• USS *Bowditch* (AG 30/AGS 4)—The 1964 reunion will be held on 14 August in Chesapeake, Va. Detailed information may be obtained from H. F. B. Delamorton, 5316 Kennebeck Court, Norfolk, Va. 23513.

• USS *Briareus* (AR 12)—A reunion for World War II crew members is scheduled for the weekend of 10 October in Atlantic City, N. J. For details, write to Robert Amos, 27 Winthrop Rd., Somerset, N. J.

• USCGC *LST 831* — A reunion is planned for 24-26 October in Pittsburgh, Pa. For information, write to Chas. H. Daniel, YNC, USNR (Ret.), 281 Finley St., Jacksonville, Ill.

• *SACO-NAVAL GROUP CHINA*—The 10th annual reunion will be held 7-9 August at the Summit Hotel, New York, N. Y. Write to Harold Bonin, Jr., 16 Arn Terrace, Secaucus, N. J., for further details on this reunion.

• *29th Seabees*—The annual reunion will be held 21-23 August at the Sheraton-Gibson Hotel, Cincinnati, Ohio. For particulars, write to R. Hugh Hancock, 531 Lowell Ave., Cincinnati, Ohio 45220.

• *Seabee Veterans of America*—The 18th national convention and reunion will be held in Las Vegas, Nev., 13-16 August. For information, write to Al Landsman, 2112 Santa Ynez St., Las Vegas, Nev.

• *1st Marine Division Association*—A reunion is scheduled for 31 July-2 August at the Marines' Memorial Club, San Francisco, Calif. For details, write to 1st Marine Division Association, 100 Harrison St., San Francisco, Calif. 94106.

• USS *Chicago* (CA 29)—A reunion is being planned in the Chicago area for early fall. For details, write to L. R. Thomas, CSC, USNR, 18 South 3rd Ave., St. Charles, Ill. 60174.

• USS *Lanier* (APA 125)—A reunion is being planned for New York City in August 1965. For information, write to Ed Mollach, Jr., Box 11, Maplewood, New Jersey.

OOD Is Steady Man on the Bridge

SIR: While refueling from USS *Canisteo* (AO 99) on 7 Feb 1964, LTJG David L. Neisius of my ship established what I believe is a record. As OOD he maintained his station alongside the oiler for 74 minutes without a change in RPM.

We would be interested in hearing from other ships who have come close to this mark.

The refueling took place off the coast of Puerto Rico.—CDR D. D. Harris, CO, USS *John Paul Jones* (DD 932).

• *Nice work. However, as far as we're concerned records are made only to be broken. We haven't heard of a better mark, but, now that you've brought it up, we just might. This sounds like remarkable seamanship. Congratulations.*—ED.

Sea Duty in *Duluth*

SIR: I have read that the Navy now has under construction LPD 6 which will be christened *Duluth*.

I sailed in USS *Duluth* (CL 87) and thought her one of the finest ships a man could serve in. I am scheduled to go back to sea again soon and would like to know when the new *Duluth* is to be commissioned. — E. L. C., LTJG, USN.

• *Duluth* (LPD 6) *is scheduled for commission in October 1965.*—ED.

They're Both the Same Ship

SIR: According to page 91 of the old *Navy and Marine Corps Awards Manual* (NavPers 15,790), *LCI (L) 816* was awarded an engagement star for the assault and occupation of Okinawa Gunto Island during the period 28 Apr to 30 Jun 1945. Later, she engaged in minesweeping operations around Nagoya, Japan.

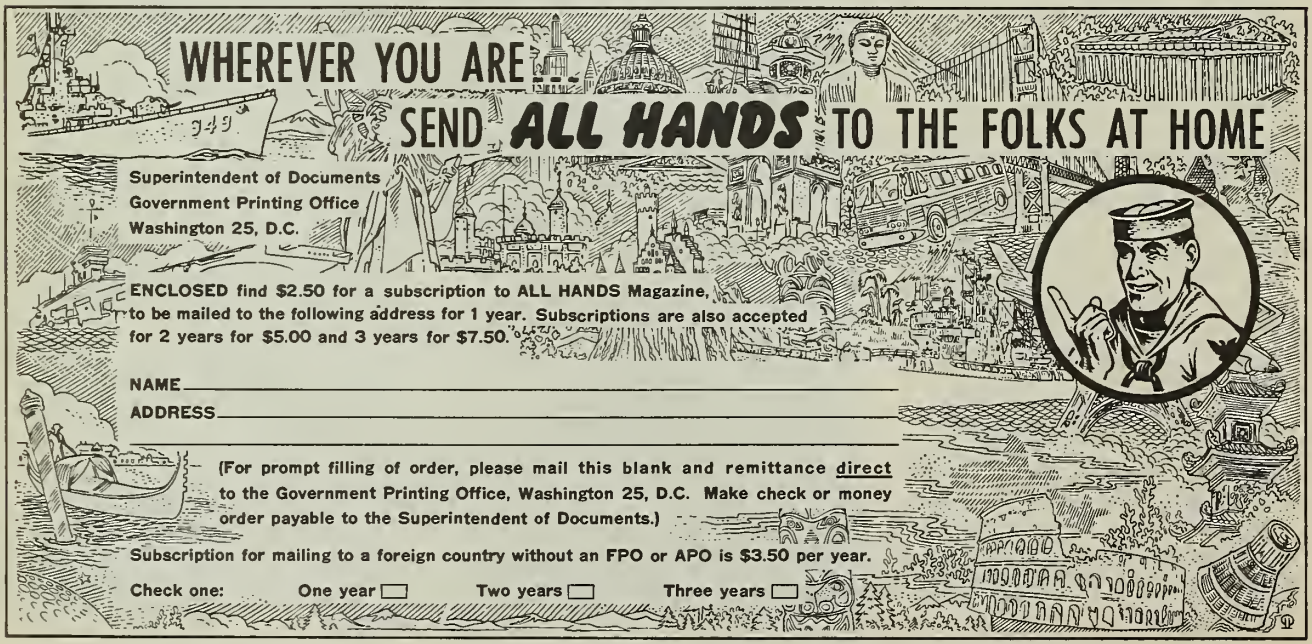
On page 85 of the *Manual*, however, *LCI 816* was awarded a star for minesweeping operations in the Nagoya (Honshu) area and another for operations at Kochi Shikoku (Honshu). There is no mention of *LCI (L) 816* in connection with these operations.

What hoppen? Did the Navy award Honshu engagement stars to the wrong ship?—J. W. W., HM1, USN.

• *It's somewhat confusing, but suffice it to say that they are one and the same. The old "Awards Manual" (NavPers* 15,790*) lists LCI (L) 816 in one place and LCI 816 in the other, but both refer to the same ship, whose complete and correct title is LCI (L) 816.*

The old NavPers 15,790 *has been superseded by the new "Awards Manual", (SecNavInst P1650.1C, revised 1953). The area lists are not included in the new part of the manual.*

For your information, LCL (L) 816 is cntitled to all minesweeping stars which wcre awarded to LCI 816.—ED.







FLEET TUG *USS Ute* (ATF 76) heads to sea. *(Rt.)* Anchor used on grounded ships is lowered to *USS Arikara* (ATF 98).

They Tow Anything That Floats

IF YOU WERE to see a little fleet tug steaming through the water with a ship fifty times its size in tow, you'd probably consider the tug crew was being put upon.

But the fleet tug would undoubtedly complete its job on schedule.

Of course, such massive jobs are not an everyday occurrence. But even when the big ship business is slow the tugs manage to keep busy. They tow barges, floating derricks, destroyers, even targets, take part in salvage operations and rescue missions and even fight fires.

There are presently 30 fleet ocean tugs active in the Navy. Larger than harbor tugs but about half the size of a *Fletcher* class destroyer, the small ships lack the familiar manila pudden or rubber fender on the bow. Four diesel engines, harnessed to a single 12-foot propeller, drive them through the water at speeds greater than 16 knots (without a tow).

Fleet tugs are named after American Indian tribes, but battle ribbons, stars and E's replace war paint. They are armed with one three-inch and six smaller anti-aircraft guns and, though the armament is light, the gun crews have learned to use their weapons to good advantage. During World War II USS *Apache* (ATF 67) counted coup on four Japanese dive bombers in eight minutes. More recently, USS *Takelma* (ATF 113) painted a third stripe under her gold gunnery E.

Although the ocean-going tugs get more than their share of oddball jobs, their primary mission is still long distance towing of both large and small ships. The job sounds relatively simple, and usually is when the elements cooperate. But during rough weather, when heavy seas break over the tug's low bulwarks, the crewmembers must struggle with their machinery on the open fantail.

If the fleet tug is a handy ship in peacetime, it is invaluable in time of war, when the demand for all-purpose ships shoots skyward. During the Korean conflict USS *Ute* (ATF 76) performed repair operations as complicated as the removal and overhaul of a diesel engine and as simple as sharpening a cross-cut saw. During World War II the 206-foot USS *Sioux* (ATF 75) attacked and sank an enemy two-man submarine with fire from her 40-mm gun.

The little ships are stationed around the world. And though they're squat, unglamorous and slow, they're a welcome sight when, far at sea, an oddball or emergency job needs to be done.

—Gerald R. Boling, JO1, USN



THIRD GOLD gunnery hashmark is painted on *USS Takelma* (ATF 113) *(Below)* A destroyer is prepared for tow by *USS Hitchiti* (ATF 103).





COOL COMMAND—LCDR R. K. Fontaine, CO of *Hissem*, stands on icy bow of ship during Operation Deep Freeze.

Picketing the Pole

ALTHOUGH IT WAS early spring in Antarctica, most of the crew in USS *Hissem* (DER 400) found it like no other spring they had ever encountered. *Hissem* was on station in extreme southern waters gathering weather information and offering navigational aid to air traffic passing overhead on its way to and from the Antarctic continent.

Weatherwise, it seemed warm—for Antarctica. The air temperature was 18 degrees and the sea temperature remained an even 29 degrees above zero. The 60-knot wind, however, succeeded in making life miserable for everyone on board and contributed to the roughness of the sea which rolled the ship 50 degrees every few seconds.

It soon became habitual for the crew members to hold on to their bunk chains while they slept and to expect their shower water to come out of the nozzle at right angles to the bulkhead.

Navigation became a problem when the ship would be completely engulfed in white mist, giving the crew the feeling they were drifting through a cloud. The navigator frequently wondered for days on end when he would get a look at a star.

It finally came to the point at which sonar had to locate a high pinnacle on the ocean floor from which the navigator could fix the ship's position.

RADAR PICKET escort ship *USS Hissem* (DER 400) steams in calm seas.



THE UNINITIATED might think a ship on ocean station in Antarctica waters might be pretty lonely. Such was not always the case with *Hissem*, however. At times, the social life became positively bountiful. On the way to its station, the ship passed Campbell's Island—a peat moss-covered weather station maintained by New Zealand on which there is a large population of seals, sea elephants and gulls. There are also 14 New Zealanders whose tours on the island run from one to three years.

Hissem refueled from the icebreaker USS *Atka* (AGB 3). *Hissem* followed astern and picked up a fire

hose which *Atka* was trailing in the water. After the hose was picked up, *Atka* pumped 10,000 gallons into *Hissem's* tanks.

Hissem also received an emergency message from New Zealand's *Rotoiti*—a ship comparable in size to a U. S. destroyer escort. *Rotoiti* had a 16-year-old seaman on board who had appendicitis.

The only way to transfer the patient from the New Zealand ship to *Hissem* was by highline. This wasn't easy. Waves from 15 to 30 feet high buffeted both ships and it took two hours to rig the line between them. Once the line was rigged, 70 men were required to handle the tension while the patient made his three-minute transit between the two severely rolling ships.

The New Zealand seaman wasn't in good shape when he reached the operating table in *Hissem*. His appendix was ruptured and gangrenous.

It was LT John Alexander's first operation in the Navy, and a critically ill patient in a rolling ship was not the best way to initiate a career.

The operation lasted four hours and was successful. LT Alexander emerged from the operating room, removed his gloves and announced in his best professional manner that the patient was doing just fine.



ICEBERG in foreground is but one of many sighted by *Hissem's* crew.

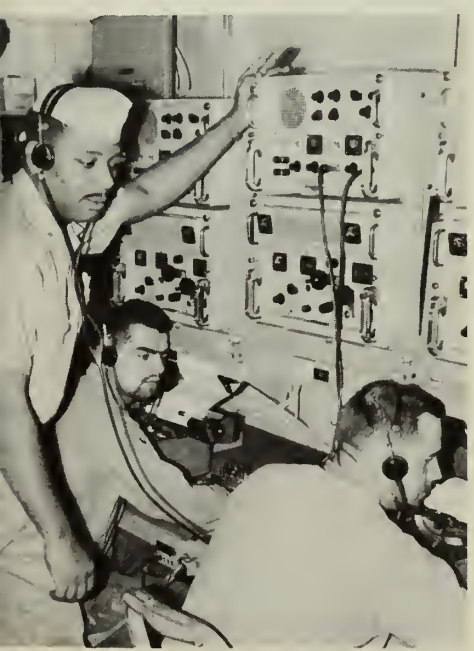
WHEN TIME hung heavy on the crew's hands, they talked to the folks back home via ham radio and phone patches and, of course, there was always a lot of professional chitchat with the pilots of New Zealand, Soviet, Australian and U. S. planes flying over on their respective missions in the polar regions.

Hissem's men furthered their careers by completing 118 USAFI courses. Thirteen men received their two-year associate degrees and 42 men were promoted in rate. For those who still wanted something to do, there were classes in economics, U. S. history and Spanish.

Hissem took the scenic route home with stops at Tasmania, Perth, Singapore and through the Med to Naples before going home to Newport. For her crew who had spent nearly a month hanging on to their bunk chains as they slept, it was a pleasant end to rough duty.

—Don McKay, JO3, USN

RADIOMEN transmit navigational data. *(Rt.)* A New Zealand man is highlined to *Hissem* for emergency operation.









TIME OUT—*USS Glacier* (AGB 4) and *Burton Island* (AGB 1) moor to ice at McMurdo after breaking open channel.

A Year in the Deep

ABOUT THE TIME the swallows returned to Capistrano, signaling the return of spring to the northern hemisphere, USS *Glacier* (AGB 4) steamed into the harbor of Lyttelton, New Zealand, leaving Antarctica to the clutches of winter and ending Operation Deep Freeze '64.

For Antarctica it had been an eventful year, which began on 1 October with an unprecedented non-stop flight by two ski-equipped C-130 *Hercules* aircraft from Capetown, South Africa, to McMurdo Station and on to Christchurch, New Zealand. The planes were manned by crews from Air Development Squadron Six.

The lead plane carried RADM James R. Reedy, USN, Commander, U. S. Naval Support Force, Antarctica. The flight itself proved the feasibility of a south polar air route.

During Deep Freeze '64, the Navy's Air Development Squadron combined its resources with a unit of the Air Force's 1608th Air Transport Wing to transport supplies through the logistic network cheaper and faster.

THE TWO organizations made a good team and not one nail, oil drum or carrot was lost in the snow after an air drop—the reason: The planes were able to land. All cargo flown by the Navy to Amundsen-Scott South Pole Station, Byrd Station, Eights Station and to Hallet Station was landed and off-loaded into waiting tractor trains.

The planes did a variety of jobs, from resupplying inland stations and trail parties to hauling cargo and personnel. Cargo flown from Christchurch to McMurdo during the season totaled almost one million pounds.

During an exploratory flight in February, a new mountain range was discovered about 80 to 100 miles east of the Shackleton Range. The mountains, which are near Queen Maud Land haven't been named yet. They are believed to be a separated extension of the Shackleton Range.

On 13 December an Air Force *Hercules*, on its last turn-around of the season, was forced to make an emergency landing at McMurdo. The plane had to circle McMurdo for four and one-half hours waiting for the weather to clear.

With fuel running low and the weather still murky, the *Hercules* made four final passes at the field as the calm voice of the Navy Air Controlman directed her down on the ski-way. Her wheels left deep furrows but the plane was undamaged.

SUPPLY SHIP *USNS John Towle* waits for escort thru ice to McMurdo Station.



DURING THE SEASON, Deep Freeze '64 was supplied with 18,900 measurement tons of cargo by USNS *PVT J. R. Towle* (T-AK 240), *PVT*



WHITE-OUT moves in on Williams NAF.

Freeze



COOL CAVE—Deep Freeze personnel study formations in Antarctic ice cave.

J. E. Merrell (T-AK 275) and *Wyandot* (T-AKA 92).

Military Sea Transport tanker USNS *Chattahoochee* (T-AOG 82) and New Zealand's HMNZS *Endeavour* supplied the Americans on the white continent with more than six million gallons of jet fuel, arctic diesel, aviation gasoline and marine diesel fuel.

One of the most demanding jobs in connection with any Deep Freeze operation is that of the ocean station ships which maneuver midway between New Zealand and Antarctica.

First of these ships on station was USS *Hissem* (DER 400)—See p. 28.

In addition to her usual duties of furnishing navigation information to overflying planes, she played the role of a seagoing hospital when her doctor was called upon to perform an emergency appendectomy on a patient from HMNZS *Rotoiti.*

As usual, the icebreakers did their nerve-racking part in getting sea traffic to and from Antarctica.

Between them, USS *Atka* (AGB 3), *Glacier* (AGB 4) and *Burton Island* (AGB 1) cleared the channel to McMurdo Station and escorted cargo ships and tankers to their off-loading points.

THE ICEBREAKERS also carved docking areas by sheer brute force, kept the sea channel clear and broke

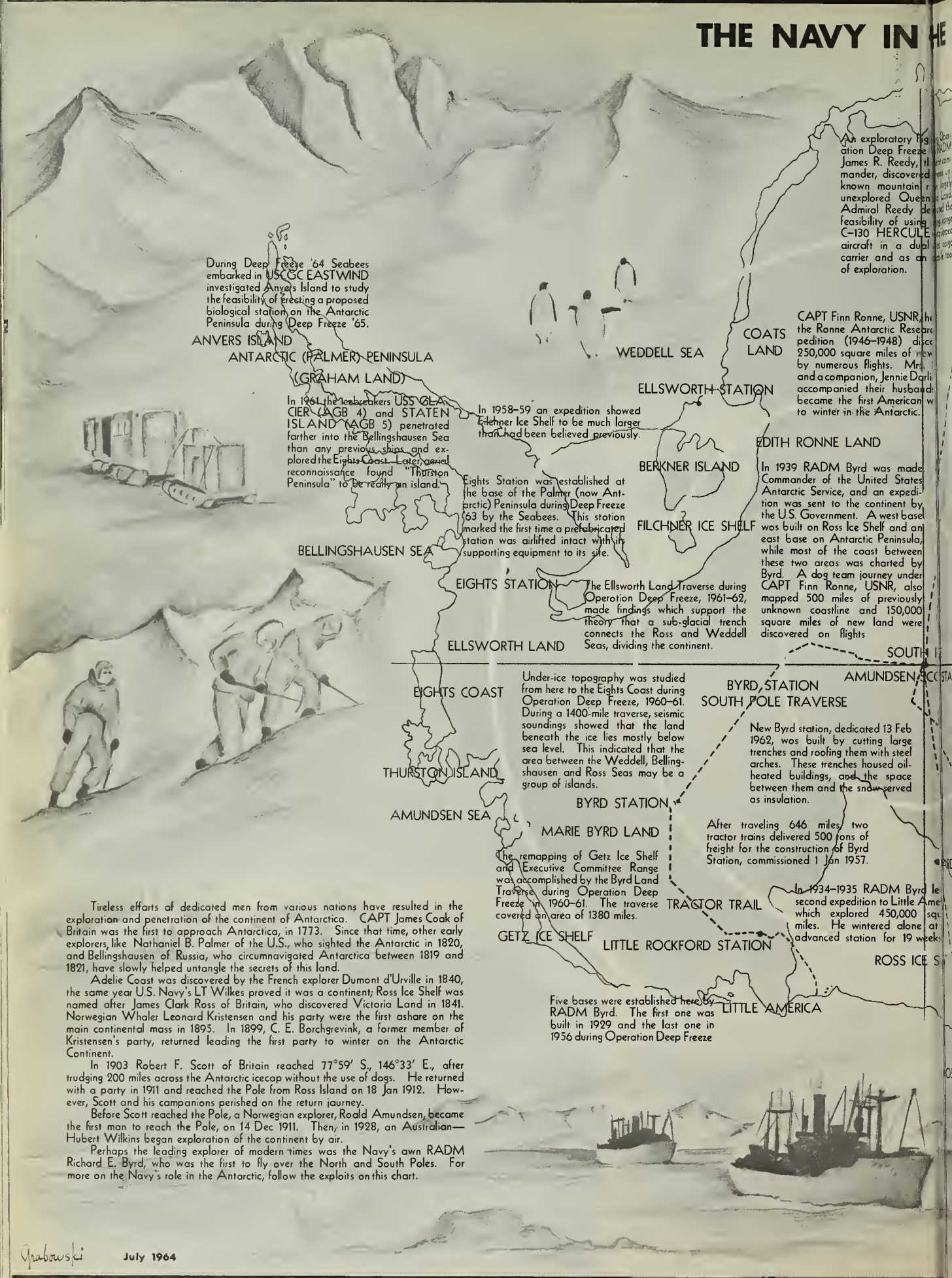
(Continued on Page 34)



PIPE THIS—Seabees of MCB-8 join pipes that are part of new distillation plant. *Below:* Navy divers are looking for tractor that fell through the ice.



THE NAVY IN HE



Tireless efforts of dedicated men from various nations have resulted in the exploration and penetration of the continent of Antarctica. CAPT James Coak of Britain was the first to approach Antarctica, in 1773. Since that time, other early explorers, like Nathaniel B. Palmer of the U.S., who sighted the Antarctic in 1820, and Bellingshausen of Russia, who circumnavigated Antarctica between 1819 and 1821, have slowly helped untangle the secrets of this land.

Adelie Coast was discovered by the French explorer Dumont d'Urville in 1840, the same year U.S. Navy's LT Wilkes proved it was a continent; Ross Ice Shelf was named after James Clark Ross of Britain, who discovered Victoria Land in 1841. Norwegian Whaler Leonard Kristensen and his party were the first ashare on the main continental mass in 1895. In 1899, C. E. Borchgrevink, a former member of Kristensen's party, returned leading the first party to winter on the Antarctic Continent.

In 1903 Robert F. Scott of Britain reached 77°59′ S., 146°33′ E., after trudging 200 miles across the Antarctic icecap without the use of dogs. He returned with a party in 1911 and reached the Pole from Ross Island on 18 Jan 1912. However, Scott and his campanions perished on the return jaurney.

Before Scott reached the Pole, a Norwegian explorer, Roald Amundsen, became the first man to reach the Pole, on 14 Dec 1911. Then, in 1928, an Australian—Hubert Wilkins began exploration of the continent by air.

Perhaps the leading explorer of modern times was the Navy's awn RADM Richard E. Byrd, who was the first to fly over the North and South Poles. For more on the Navy's role in the Antarctic, follow the exploits on this chart.

Grabowski

July 1964

HE ANTARCTIC

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•ROI BAUDOUIN STATION

PRINCESS RAGNHILD COAST

A new route ta the Antarctic was pioneered by RADM James R Reedy when he apened Deep Freeze '64 with a nan-stap 4100-mile flight from Copetawn, Sauth Africa, aver the South Pole, to McMurda Stotion, Antarctica. This epic flight wos mode possible by the use of new bulk fuel tanks in the aircraft. Valuable infarmotion cancerning cammunicatians in this palar regian was gleaned fram Admiral Reedy's flight aver a largely unknawn areo at the battam af the earth.

SØR RONDANE MOUNTAINS

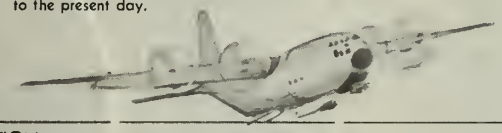
ENDERBY LAND

Future Navy explaratians will include recan flights in suppart af a four-year scientific traverse inta Queen Maud Land. This traverse will be braken into three 1000-mile segments an a zig-zag track, with the last leg being the crassing af the Sor Rondane Mauntains ta the Princess Ragnhild Caast at the Belgian statian of Roi Boudouin.

QUEEN MAUD LAND

RADM Richard E. Byrd made a 1600-mile airplane flight, crassing aver the South Pale on 29 Nav 1929. The flight lasted 19 haurs ond made him the first man in histary ta complete flights aver bath poles. After the British explarer, Scatt arrived by faot ot the Sauth Pole in 1912, o periad af almast 45 years elapsed before anyane set faot an the Pole agoin. Then, on 31 Oct 1956, RADM Gearge J. Dufek, USN, Cammander of Operotion Deep Freeze II, landed and later estoblished o camp by oirdrap. Since this initiol establishment, the bose has been occupied to the present day.

AMERICAN HIGHLAND







STATION

During Deep Freeze '64 Seabees erected a 180-faot radia antenna and suppart towers far a jaint US–USSR scientific project at the Russian scientific statian af Vastack.

During Operotion Highjump in 1947 Navymen discovered ice-free 'lakes.' The lakes, really inner extensions of the seo, were strewn among borren, brown hills in an area af 300 squore miles.

"OASIS"

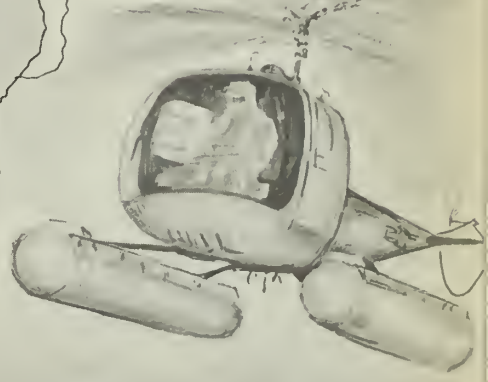
RADM Byrd wos officer-in-charge of the U.S. Navy's Operation Deep Freeze I (1955–56). Under RADM Gearge J. Dufek five caastal and twa interiar stations were established, the coostol stotians being on the Pacific, Atlantic ond Indian Oceans. The explaratian af abaut ane millian square miles of unknown Wilkes Lond olsa wos accamplished.

McMURDO POLE TRAVERSE

The United States Novy undertaak Operotion Highjump (1946–1947) with the largest Antarctic expeditian ever organized. The expeditian, consisting af 13 ships and same 4000 men, was cammanded by Reor Admiral Richard H. Cruzen. Admiral Byrd also returned ta the Antarctic on this trip. Twenty-nine lond-based flights from Little America and 35 fram seaplane tenders phatagraphed most of the cantinent's coastline. Flights were alsa made beyand the Pole.

RDMORE STATION

LT Charles Wilkes, USN, wos the first ta annaunce the existence of the continent af Antarctica. He reported lond ot 158° Eost an 16 Jan 1840. He later fallawed the caast westward far 1500 miles.



In 1962, a 1500-kilowott nucleor plant intended to provide heot, light, pawer and drinking water distilled from the sea—wos installed here by the Seabees.

WILKES LAND

McMURDO STATION
NUCLEAR PLANT

OSS SEA

After traveling 1500 miles during Deep Freeze '60 the Victario Land Traverse faund a large glacier and a remote mauntain range here. Besides making these discaveries, the party found bedrack to lie generally 1000 feet belaw sea level, usually cavered with ice averaging 10,000 feet in thickness.

VICTORIA LAND

ARCTIC
INSTITUTE
RANGE

This oreo was explored by LT Charles Wilkes, USN, in 1840.

HALLETT STATION
(Jointly with New Zealand)



Prepared by ALL HANDS Magazine



LAST SHIP to leave Antarctic at close of Deep Freeze '64 was *USS Glacier* shown at Hut Point prior to departure.

out the ice in winter quarters bay where much of the accumulated trash of several Deep Freeze years had been bulldozed. With the ice broken, the trash floated out to sea, presumably never to be seen again.

The Coast Guard icebreaker USCGC *Eastwind* (WAGB 279) undertook the task of surveying a site on the Palmer Peninsula for a proposed U. S. Antarctic research program station.

This winter, scientists in Antarctica will further their knowledge of upper atmosphere physics by using special antennae raised at the Pole, Byrd and McMurdo Stations and the Soviet Union's Vostok station.

An American exchange scientist is wintering over at Vostok to observe the Soviet program while a Soviet scientist is at our Byrd Station.

MAJOR PROGRESS was made during this year in building the sea water distillation plant which when completed will provide the inhabitants of McMurdo Sound with a dependable supply of drinking water.

The sea water will be pumped

It's That Time Again to Make Your Bid to Get Away From It All in Dee

It's time to volunteer for next year's Operation Deep Freeze if you're so inclined and can qualify. As announced in BuPers Notice 1300 (dated 22 Apr 1964), applications for duty with the 1965-66 Antarctic Support Program are now being solicited.

If you're qualified, volunteer, and are selected, you'll deploy to the cold continent about September 1965.

Those needed for a wintering-over party which will remain in the Antarctic until November 1966 are:

• **Officers** – 13XX CDR (commanding officer); 1530/13XX LT and below (meteorological experience); 13XX LCDR or LT (ground control approach experience); 11XX LT and below (communications experience); 21XX LCDR or LT (including flight surgeon. Previous surgical experience and active duty are desirable); 22XX LT; 31XX LCDR and below; 41XX LCDR and below; 51XX/57XX LCDR and below; 849X; 798X.

• **Enlisted**—ET/ETN (also NEC ET-1533), RM (also NEC RM-2302 and RM-2342), YN, PN, SK, DK, CS, SH, SH-3122, EM, IC, EN, DC, MR, SF, CE, CM, EA, EO, BU, SW, UT, CN, AG (preferably "B" school graduates), AB, AC, AT-1577, PH, HM (preferably "B" school graduates) and DT.

Additional officers and enlisted men are needed for duty with Air Development Squadron Six (VX 6), the Navy's principal Antarctic support group.

Approximately 20 officers will be selected for VX 6, four of whom will be assigned to the wintering-over party. Required are: 13XX CDR and below, experience in C-121, C-117, LH-34, C-130 or C-47 aircraft types; 135X LT and below, experienced aerial navigators; 31XX LCDR and below; 711X; 741X; 831X; 68XX LT/-LTJG; 685X LT/LTJG.

Some 100 enlisted men will be selected for VX 6, 23 of whom will winter over. Ratings required are: RM, YN, PN, SK, DK, CS, JO, SN, AD, ADJ, ADR, AT, ATN, ATR, AB, AE, AM, AMS, AMH, AME, PR, AK; PH, AN, AZ, HM, DT, SD, TN.

In addition to possessing one of the designators or ratings listed you must be able to meet the following qualifications:

• Have 24 months' obligated service from December 1964. I you're lacking in obligated service you may agree to extend. If you're a Reservist, or will be eligible fo transfer to the Fleet Reserve, you must agree to remain on active duty until December 1966.

• Have a clear record, reflecting sound moral character and profes sional dedication. Any history o domestic problems or indebtednes will disqualify you.

• Be recommended by you commanding officer on the basis o your performance, technical skill resourcefulness, versatility, and in terest.

• If you apply for duty with VX 6, you must be cleared fo access to secret material.

• If you're an enlisted man, you may not be older than 45 (unless you're a chief with exceptional pro fessional qualifications).

• You must meet the strict phys ical standards specified in the latest BuPers Notice 1300.

If you volunteer for the 1965

from under the ice of McMurdo Sound 400 feet to the top of Observation Hill, where it will be distilled, using nuclear power, and converted into fresh water at the rate of 14,000 gallons a day.

A wide range of construction projects were completed during Deep Freeze '64 at a variety of altitudes —from the Amundsen-Scott South Pole Station, located at an altitude of almost 10,000 feet above sea level at the geographic pole, to coastal stations such as those at Cape Hallett and McMurdo.

As the Antarctic night engulfed the frozen continent, 286 Americans remained behind—27 at Byrd Station (plus one Soviet scientist), 10 at Eights Station, 11 at Hallett Station (plus two New Zealand scientists), 215 at McMurdo Station, one at the USSR's Vostok Station and 22 at the South Pole.

The men of the wintering-over party will next see new faces around the first of October—about the time the swallows leave Capistrano; signaling, among other things, the beginning of Deep Freeze '65.

reeze '65

66 program your application must be submitted via the Chief of Naval Personnel to the Commander, U. S. Naval Support Force, Antarctica. Your request should be on the Commander's desk no later than 15 Aug 1964.

Those selected will be ordered to the Naval Station in Washington, D. C., or the Receiving Station, San Francisco, Calif., for screening.

After final screenings have been made, permanent change of station orders will be issued to the men selected, directing transfer to Antarctic Support Activities, Davisville, R. I., or Air Development Squadron Six, NAS Quonset Point, R. I. Deployments to the Antarctic will get underway in the fall of 1965.

If you complete a Deep Freeze tour you'll be awarded the Antarctic Service Medal, and, if you winter over, every effort will be made to assign you to duty of choice.

Further details on volunteering for Deep Freeze, and the physical standards that must be met by those who do, is in BuPers Notice 1300 of 22 Apr 1964.



NEW LOOK—These mountains were discovered in Feb. '64 during flight over Queen Maud Land. U. S. flag and message were dropped to mark discovery.

South Pole Has Model Homes

New arrivals in Antarctica are never faced with the dilemma of whether to settle down in a split level or a rambler. The models available are all classified as huts—Jamesway, T-5 and Quonset.

Antarctica's port of entry for U. S. personnel is McMurdo Station. It is a nine-year old town and has served as long as the hub of American exploration in the frozen continent.

McMurdo, like many a small U. S. town, is built around a square. There is a difference however. The buildings are sizable, gray-sided T-5 huts with slightly sloping roofs and small windows. Among other centers of communal activities, they house the post office-theater and the station dining hall.

The T-5 huts arrived in Antarctica in prefabricated aluminum and insulated plywood sections which were coupled with wedged clips.

The older buildings at McMurdo are less spacious and are particularly familiar to World War II Navymen. These are the Quonset huts used as quarters for the summer sailors and scientists who begin arriving in Antarctica in October and leave in March.

As any Navyman who has lived in a Quonset hut can testify, there is a considerable difference between the temperatures in the bottom bunk and the top bunk.

At McMurdo, the difference is more extreme than usual, for the man in the bottom bunk is swaddled in blankets while the man in the top bunk could sleep in his skivvies in 90-degree heat.

This less than satisfactory situation will be corrected, however, with the replacement of the Quonsets by permanent barracks which will have controlled circulating heating systems. The first of these is scheduled for Deep Freeze '65.

Jamesway huts are the third type of shelter found at McMurdo. They are similar to the Quonsets in that they are half a cylinder with the flat side on the ground. This is the end of the similarity, for Jamesways are simply ribbed framework covered with insulated canvas.

This type of building is intended to be temporary and can be quickly constructed.

It has served for years to shelter

SAY CHEESE—A penguin and young, favorite subjects of South Pole shutterbugs, pose for a photograph.







OLD AND NEW — Scott's hut was built in 1911. (*Rt.*) Jamesway Hut provides comfortable place to dine.

the men at remote field activities and small weather stations. Williams Field, which is Antarctica's largest airstrip, is virtually a Jamesway city, with everything from dining hall and movie theater to hospital housed in the canvas huts.

McMurdo Station is built on the solid rocky shore of Ross Island. Construction problems multiply when Antarctic parties move inland.

At Byrd Station, high on the South Polar plateau, men must live at an altitude of several thousand feet atop an accumulation of centuries of snow and ice.

New Byrd Station was literally carved out of the snow. There are more than one and a half miles of deep trenches roofed over with metal arches which are later covered with snow. The buildings of the station are all T-5 huts which rest in the sheltered tunnels free from drifting snow which crushed Old Byrd Station six miles away.

The tunnels at Byrd were cut with a snow milling machine which is capable of cutting a swath almost nine feet wide and slightly more than four feet deep through solid ice. A swath 300 feet long, for example, can be cut in half an hour.

Surprisingly enough, New Byrd Station is now of the most comfortable settlements on the Antarctic continent. This in spite of the outside temperatures which reach 83 degrees below zero.

Even the undersnow temperatures are often below zero. The heating and ventilation of the T-5 shelters is so ingenious that it provides something approaching normal comfort in more temperate climes.

The newest American outpost in the Antarctic is Eights Station, which is located on the ice plain at the foot of Palmer Peninsula, 1368 miles from McMurdo.

Eights Station was constructed during Deep Freeze '63 as a fully portable science station to correspond with an upper atmosphere physics laboratory near Quebec City in Canada.

The two stations occupy sites near the opposite points at which a single line of geomagnetic force intersects the earth in the southern and northern hemispheres.

The scientists at Eights Station wanted a camp which could be dislodged from the accumulated snow and relocated to another site by airlift.

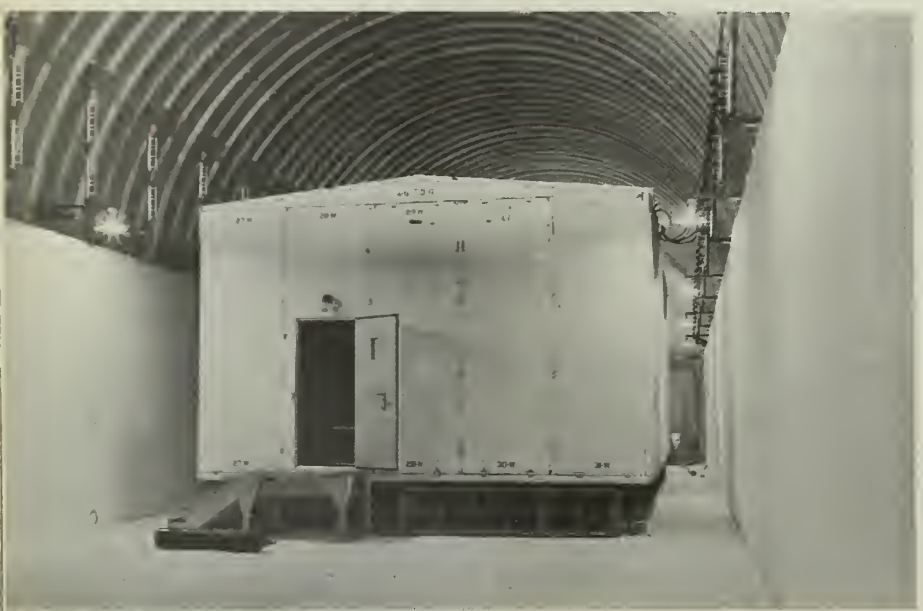
Eleven huts were constructed in the United States and brought to Antarctica by ship, and subsequently airlifted to the site of Eights Station.

Within weeks, the Seabees of Mobile Construction Battalion Eight had the camp set up, and scientific personnel were recording atmospheric conditions.

Although construction techniques on the white continent have improved tremendously since the first Americans in Antarctica built their first crude huts, research to provide more permanent, functional and comfortable living and working spaces still goes on.

—Don H. Roxmeyer, JO3, USN

BURIED T-5 prebaf buildings of New Byrd station are in tunnels under snow.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

It's Dunkable

As submarines are designed to go deeper, the problem of providing stern tube seals which can withstand the great pressures of depth must be solved. These seals protect the opening where the propeller shaft penetrates the hull.

If a new submersible electric motor now being developed by the Naval Marine Engineering Laboratory, Annapolis, Md., proves feasible, the problem might be solved by eliminating the need for a stern tube.

MEL began work on the new motor about two years ago, and a test model has already completed over 7500 hours' running time. The motor is designed to be mounted outside the hull of the submarine, thus requiring hull penetration only for electric cables.

It has no shaft bearings; it has a hollow shaft and is about half the size and weight of a conventional motor of comparable rating. Its operation is quieter than that of conventional types.

The new motor is adaptable to a wide range of sizes and uses. Some potential applications are for use as the ship's propulsion system, for ship's rudder and maneuvering devices, for pumps and for towed or streamed devices.

The MEL submersible motor has proved feasible in laboratory tests of experimental models. However, more work remains to be done in development of materials and design guidelines and more studies of specific applications are needed before the motor is ready for shipboard use.



NEW ONE—Guided missile destroyer *USS Richard E. Byrd* (DDG 23), named for Anarctic explorer, has been in commission since 7 March of this year.

Fleet-Wide Exercises

More than 50 ships were involved in separate First and Second Fleet exercises early this year. Operation Red Cloud was conducted by the First Fleet off the coast of southern California and Springboard 64, conducted by the Second Fleet, took place in the Caribbean.

Both operations centered around carrier striking forces.

Springboard, the larger of the two, included 31 ships. During this exercise two aircraft carriers operated with missile-equipped screening ships to test the fast carrier task group concept. (A fast carrier task group consists of three or four ships which escort an attack carrier and furnish antisubmarine and antiaircraft protection while operating at high speed over long distances.)

Attack carrier USS *Saratoga* (CVA 60), accompanied by USS *MacDonough* (DLG 8), *Sellers* (DDG 11) and *Charles F. Adams* (DDG 2) were first to try the idea. Later, USS *Forrestal* (CVA 59) operated with USS *Leahy* (DLG 16), *Lawrence* (DDG 4), *Sampson* (DDG 10) and the cruiser *Boston* (CAG 1).

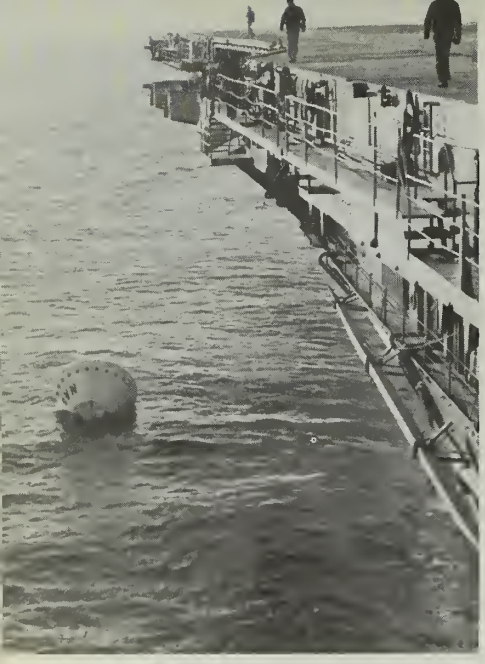
A number of Second Fleet ships homeported in Mayport, Charleston, Norfolk, and Boston also participated in Springboard 64.

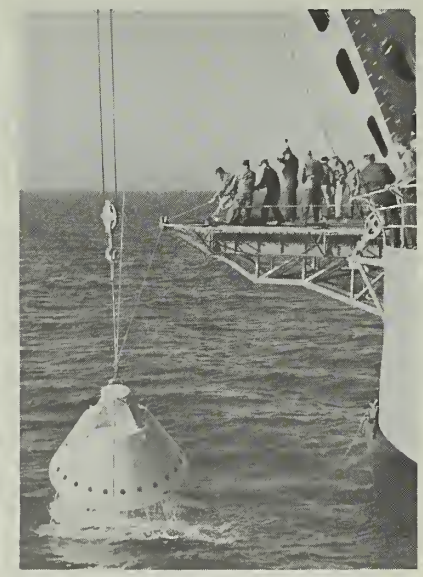
Operation Red Cloud, which was conducted in the eastern Pacific, consisted of carrier strike exercises and antisubmarine operations. Ships involved were USS *Constellation* (CVA 64), *Ticonderoga* (CVA 14), *Saint Paul* (CA 73), *Columbus* (CG 12), the amphibious command ship *Estes* (AGC 12). There also were three auxiliary ships and eight destroyers.

BUILDERS OF THE NAVY

Commodore Edword Preble believed in and expanded Truxtun's ideas regarding discipline. He wos keenly interested in his blue jackets ond shared respansibility with his afficers, encauraging them ta offer new ideas. When credit was due, he was free ta give it, and he olso urged promotions and hanars for thase who earned them. Preble's leadership—which produced absolute abedience, unyielding caurage and 24-haur-o-day efficiency—paid dividends in the Wor of 1812, when his men scored 17 of 18 victories wan by the Navy.









APOLLO SPACE capsule is hoisted aboard *USS Intrepid* (CVS 11) during test of carrier's recovery capabilities

Slick Recovery, by *Gemini!*

Atlantic Fleet units have begun training for the recovery of *Gemini* and *Apollo* spacecraft. The first of the *Gemini* flights, during which two astronauts will rendezvous in space and return in one capsule, is scheduled to take place either late this year or early in 1965. *Apollo,* the moon flight, is tentatively scheduled for 1969.

The first training operations involved USS *Intrepid* (CVS 11), *Lind* (DD 703) and *Elokomin* (AO 55). Frogmen from Underwater Demolition Team 21 were embarked for the exercise. Carrier-based search aircraft and P-3 *Orion* land-based ASW planes were used for search operations.

Special NASA-designed cranes have been installed aboard *Lind* for use when lifting the *Gemini* and *Apollo* craft from the water.

The recovery force is coordinated by Commander Task Force 140. NASA officials from the Manned Spacecraft center at Houston, Tex., were on hand to provide technical assistance and will approve final plans for the recovery.

Award for *Thresher* Search

CAPT Charles B. Bishop, USN, has received a gold star in lieu of his second Navy Commendation Medal for his part in the search for USS *Thresher* (SS 593) last summer.

Captain Bishop was a personal advisor to the Assistant Secretary of the Navy for Research and Development during the search operations. He was coordinator of all efforts to find and identify *Thresher's* remains.

The captain conducted personal research on available techniques for deep ocean surveillance. Then he directed the development of specialized camera, sonar and television equipment required for the job. There were several naval units and civilian groups participating in the operations.

The commendation, signed by Secretary of the Navy Paul H. Nitze, cited Bishop's "sound judgment, keen foresight and untiring devotion to the fulfillment of an extremely difficult and arduous task."

After completion of the *Thresher* assignment, Captain Bishop assumed command of the attack cargo ship USS *Arneb* (AKA 56), homeported in Norfolk, Va.

SKEET IN THE FLEET—An officer on board *USS Topeka* (DLG 8) takes his turn bringing down clay birds in ship-wide tournament held at sea.



Galvao Has Master's Touch

Chief Gunner's Mate Joe Galvao is getting in shape for the All-Navy rifle and pistol championships by firing his guns four hours a day, six days a week, and by setting national shooting records. Indications are that he will provide formidable competition for any championship hopefuls.

Up to the middle of March he had already set seven new records of varying importance, while also performing his duties at the Small Arms Training Unit, NTC San Diego. Two records are of national significance.

Galvao won 2700 grand aggregate with a score of 2666-102X; and the .45 caliber aggregate with a score of 891-33X. He also set a service record for the .22 caliber aggregate with an 892-40X score and tied the national match record in the .45 caliber class with a 297-11X —all while competing at the Orange County police range in Anaheim, Calif.

Other records and titles he has to his credit include the 1963 California state rifle championship; the Springfield, Ill., long range rifle championship; range records at both the San Diego and Orange

County police ranges; and the national individual pistol records, among others.

A Master in both pistol and rifle categories, Chief Galvao is a member of the All-Navy rifle and pistol team. He first started shooting in competition in 1957, two days after his wife gave him his first rifle. That day he was asked to shoot in the Great Lakes elimination matches and surprised himself by winning. He has been winning since.

Sound Wiring Job by *Pablo*

Uss *San Pablo* (AGS 30) Navymen ran into a perplexing problem when the wire on their oceanographic winch needed replacing while the ship was in Bermuda.

Logistics was no problem: There was plenty of wire on hand. But unfortunately it was wrapped—the entire five miles of it—around the manufacturer's spool. And transferring wire from a spool to a winch is a job which requires specialized equipment and a crew of skilled riggers.

Or an unorthodox jury rig, the raw material for which happened to be all that was available.

The necessary specialized equipment was fabricated from two old four-by-four timbers, rope, wire, lead ballast, a snatch block and a fork lift. These were combined to hold the spool and keep the proper tension on the wire while it was being spun onto the winch. Without the tension, the thin cable tends to kink and bury itself under deeper layers.

First, the lift was raised slightly higher than the radius of the spool,



GOOD SHOT — Joseph J. Witherell, PR1, USN, of VT-2 displays some of the shooting awards he has earned.

and the wire was mounted between the works.

Tension was provided by the timbers, one of which was put behind the front wheels of the vehicle, with the other laid across the forks in front of the wire. The planks were connected by two Spanish windlasses, which were tightened to put pressure upon the manufacturer's spool. A snatch block was rigged to absorb minor variations in tension.

Lead ingots from the installed ballast in *San Pablo's* forward bilges were used as buffers between the spool and the fork lift, preventing the spool from being worn away by contact with the steel lift.

It wasn't exactly standard procedure, but it worked, and about 78 man-hours after the problem had presented itself the Navymen had spun the entire 30,000 feet of wire onto the winch.

Landing Craft Scheduled for '64

One surveying ship (T-AGS 27) and 65 landing craft, mechanized (LCM) will soon take shape in U. S. shipyards as part of the Navy's shipbuilding and conversion program for fiscal year 1964.

The surveying ship will be designed and equipped to conduct hydrographic surveys and collect other special hydrographic, acoustic and meteorological data.

It will be similar to the Navy's latest oceanographic research ships except, of course, the oceanographic research spaces will be adapted for the conduct of hydrographic surveys. The survey ship will be capable of self-support on independent operations for extended periods.

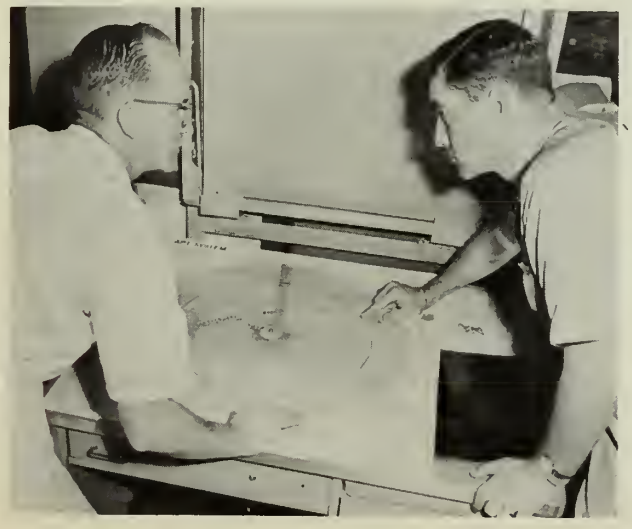
The new ship will have an over-all length of 285 feet and a beam of 48 feet. Its full load displacement will be 2580 tons.

The new LCMs will have an over-all length of 56 feet with a maximum beam of 14 feet. Their full load displacement will be approximately 53 tons. Each craft will be powered by two diesel engines.

The LCMs will be used primarily to transport troops and equipment from ship to shore in amphibious operations and for general cargo handling.

For additional information on landing craft see July 1964 All Hands.

WEATHERMEN W. C. Way, AG1, and LT V. J. Schuppert check orbital path of *Tiros VIII* (left), and examine picture received by *USS Saratoga* (CVA 60) from the weather satellite which was placed in orbit last December.







ALL ABOARD—Charter buses load for week-end trip to ship's home port.

Liberty by the Bus Load

When uss *Canberra* (CAG 2) turned in at Long Beach Naval Shipyard for an overhaul, her crew was only a hundred miles from home port and nobody had any illusions about San Diego-based sailors on liberty sticking around Long Beach for the week end.



SAFE RETURN—Buses arrive back.

A look at the traffic hazards between Long Beach and San Diego convinced *Canberra's* captain that his crew might well be decimated if they turned out en masse for a drive through the mish-mash of week-end traffic in individual cars.

Acting accordingly, he authorized the charter of special buses to carry the ship's liberty-bound sailors home and back.

Each man with the price of a fare was guaranteed a seat on the bus and, if the last bus wasn't filled, *Canberra's* recreation fund absorbed the difference. Each week, three or four buses were needed for the trip.

Canberra's facelifting at Long Beach will be finished in mid-July when she too will return to San Diego—but not by bus.



SITTING PRETTY—Men of *Canberra* (CAG 2) relax on way to San Diego.

Borers Eat Deep—and Well

Marine scientists have concluded after underwater tests that there is simply no way of escaping them. The objects of their distaste are wood borers, which plague the builders of wooden piers and now have been found at a depth of more than 5600 feet.

Several months ago, scientists submerged a metal rack off the coast of California's San Miguel Island. The rack was loaded with more than a thousand specimens of materials that might be used in deep ocean construction.

When the rack was brought to the surface recently scientists found an average of 25 borers per square inch around the mud line of the wooden panels being tested. Even three feet above the mud, at least one borer was found happily munching away at each square inch of wood.

What was worse, the deep-water borers were found to be more voracious than their surface cousins, since they attacked manila rope which their upstairs relatives found indigestible.

Borers weren't the only marine varmints which attacked the test material—slime bacteria, for instance, concentrated on plastics and nickel-plated surfaces and an unidentified fouling animal was found on a cut end of polyvinyl chloride pipe.

Some materials, however, came through the test well recommended for a deep sea environment. Steel alloyed with titanium proved to be the material which best withstood the ravages of the deep.

Plastics, while not as strong, withstood corrosion as well as the titanium alloys. Other alloys succumbed less to stress in the depths than they did at sea level.

The San Miguel rack was the first recovered from a group of three which have been underwater for months.

Other underwater material tests are scheduled for the future.

LaSalle Commissioned

A new amphibious transport dock ship officially joined the Navy recently. She is uss *La Salle* (LPD 3).

The stern of the new ship opens to flood its large well deck with sea water for launching landing craft and amphibious vehicles. The new LPD also has a flight deck which accom-

modates six troop helicopters.

During an amphibious attack, about 900 combat-loaded Marines and their equipment can be put ashore by means of landing craft and helicopters.

La Salle's keel was laid in April 1962. She is scheduled to be completely outfitted by the end of this month.

Water Plant at Gitmo

The first of three desalinization plants arrived in April at the Guantanamo Naval Base in Cuba.

The installation is expected to be in operation sometime in August.

Used experimentally in southern California since 1962, the plant was dismantled for shipment to Gitmo soon after the President ordered the base to be made self-sufficient.

Special off loading and transportation equipment was necessary to move the 608-ton plant from the ship to the reconstruction site about two miles away. The heaviest objects were the eight evaporator shells, the largest of which weighed 75 tons. Six others weighed 65 tons each and the smallest, about 40 tons.

The two remaining plants, now under construction in the U. S., will be shipped to Guantanamo this summer. The last should be in operation by December. The three will distill 2,200,000 gallons of water a day—more than enough to supply the base. In addition, they will furnish Gitmo with electrical power.

Pine Island Aids Project

A detachment of 15 Navymen and two helicopters were sent to the Galapagos Islands early this year to take part in the Galapagos International Science Project.

The project, sponsored by the National Academy of Science, is a program which involved 60 scientists and students from Japan, Australia, New Zealand, the United States and several Latin American countries. The participants collected data for research in biological and physical science fields, including oceanography, pedology, geology and meteorology.

The Galapagos archipelago, located about 600 miles due west of Ecuador, consists of 12 large islands (one of which is an active volcano) and several hundred smaller ones. It is a biologist's paradise: 96 per cent of all known species of reptiles, 40 per cent of the plants, and 37 per cent of the world's shore fish are represented on the islands.



HAND TALK — J. A. Lusk, ET2, USN, from *USS Ajax* (AR 6) teaches deaf Japanese teen-agers English version of sign language and lip reading.

Galapagos' life forms were first studied intensively by the British naturalist Charles Darwin. Observations made by Darwin on the islands in 1836 may have been instrumental in the development of his theory of evolution. Since that time, numerous expeditions have visited there.

The two Navy helos transported the scientists to otherwise inaccessible volcanoes and mountain peaks. Surface travel was difficult due to the rough volcanic terrain.

The Navy's primary interest in the project was the collection of biological materials and sea life samples as well as meteorological observations.

Both SH34J helos and their crew members were transported to the Islands on board uss *Pine Island* (AV 12), which was sent to the area to conduct advance based seaplane tender operations. The helos are part of Helicopter Squadron Four, home based at NAAS Ream Field, Calif.



HELPING HANDS — Crew members of *USS Pollux* (AKS 4) check pipe they donated and installed to carry water to Mabayo, Philippine Islands.



SHARP SAILORS—Navy's ceremonial guard greets VIP arriving at capital.

Navy's Ceremonial Guardsmen

UNLESS A UNIFORM change ever does away with them completely (which seems unlikely), there will always be white hats bobbing and bell-bottoms flapping to the cadence of drums down Constitution Avenue in Washington, D. C.

Our nation's capital is a city brimful of official ceremonies of one type or another. It is also a city with a large military population—including a sizable Navy community. When the bands assemble, the marching music rouses local Navymen as much as it does anyone else, and pipes them on deck to add more color and prestige to the ceremonies of state.

Because there are so many ceremonial observances in Washington—including some which are scheduled on a weekly and even daily basis—each service maintains units in the area which are always prepared to participate when called upon. For about 60 Navymen attached to NAF Washington, D. C., this means part-time careers as ceremonial guardsmen.

Ordinarily, these ceremonial guardsmen can be found toiling on the flight lines or in the hangar areas at Andrews Air Force Base, where the Naval Air Facility operates. In addition, they devote a certain portion of each week to intensive drill. They march, do close order drill, fire weapons for familiarization, and receive instruction.

Besides normal practice, they drill on the movements for a particular ceremony until they can execute them with precision. On the evening preceding an event, they are inspected by the officer-in-charge and trainer of the unit, LTJG Robert J. Olivari.

This ceremonial guard unit is composed primarily of non-rated men who have been chosen on the basis of their good posture, excellent physical coordination and cooperative attitudes. They must be responsible individuals because they perform in the presence of top officials and are many times in the international spotlight.

For example, this unit is on hand to render honors to many visiting state dignitaries, such as Italian President Segni and the British First Sea Lord, Admiral Sir David Luce who were in Washington recently; and they also participated in the late President Kennedy's funeral.

They are in a big showcase.

Red Carpet for Younger Set

Seagoing Navymen may have had an opportunity to play host to at least one group of prospective young sailors on a cruise or on board for a week end visit.

Chances are the guests were taking part in one of the several junior Navy programs available to boys between the ages of eight and 18—Sea Explorers, an advanced phase of the Boy Scouts of America; Sea Cadets administered by the Navy League and Shipmates, also sponsored by the Navy League.

A group of Sea Cadets from Stamford, Conn., were recently guests on board uss *Mitscher* (DL 2) at Newport, R. I. Their visit was typical of many which take place during the year.

The boys arrived on board the Newport Naval Base at about 1000, were assigned bunking space, given lunch and went on a tour of the base.

After the grand tour *Mitscher's* commanding officer inspected them and sent them off to explore the ship, after which they saw a movie and had dinner with the crew.

On Sunday, after church, they repeated the dinner with the crew before returning home to Stamford.

Oh Buoy! It Floats

One form of technological development we can really appreciate is that which saves us from pulling duty on a 40-foot disc, in 60-foot waves, miles out at sea, while sending back oceanographic data. Here is a situation in which we applaud the use of pushbuttons in place of people.

Little chance exists that we should ever pull that type of duty, but the work must be done. If some experiments with two "telemetering buoys" prove successful, the work *will* be done by pushbutton.

This new type of buoy system was recently described at the International Buoy Technology Symposium in New York, and is under development by private industry for the Office of Naval Research. The objective of the program is to develop a much-needed system for gathering and storing oceanographic data and transmitting it to shore stations from many miles at sea.

A network of these buoys scattered strategically throughout the world's waters could give oceanographers and meteorologists a general record of air and water phenomena previously unobtainable or incomplete.

The type of buoy being considered for this job is discus-shaped, 40 feet in diameter. It is topped by a 32-foot mast which supports what is called a discone antenna.

A slack line—one and one-half times the water depth at the buoy station—will probably be used to moor the buoy. The oceanographic information will be collected through electrical sensors, attached to the line, which will take various measurements, such as water temperature at different depths, current direction

and speed and light transmission through the water.

Two full scale prototypes of this new buoy are being constructed and will be tested later this year off the coasts of Florida and California.

A group of the nation's leading oceanographers hope to see the following capabilities built into the buoy system:

- At least 100 sensors for acquisition of oceanographic and atmospheric data on each buoy, capable of being scanned once an hour.
- A capability for the buoy to telemeter stored data from the sensors—upon command from a shore station as much as 2500 miles away—once every six hours.
- A capability also for all data to be stored on board the buoy in a long-term memory unit.

Many shapes and sizes of buoy hulls have been studied to find one that could best support the system's equipment and the transmitting antenna. A relatively stable buoy shape was required so that the antenna would be subjected to a minimum of motion.

Studies showed that a discus-shaped buoy hull would best meet the requirements. A model of this configuration was then subjected to simulated typhoon winds, waves and currents in a towing basin.

The buoy must also be able to weather 60-foot waves, 10-knot currents and 150-knot winds—all while floating on the surface and anchored in depths exceeding 20,000 feet.

Other elements of the over-all system have been the subject of much study.



UNDER ITS WINGS—An A6A *Intruder* of VA-42 carries full bomb load which is only one of many 'cargoes' plane is capable of delivering.

Think Fast—And Be Right

When a main feed pump exploded in USS *Springfield's* after fireroom, ENS Curtis A. Hinton's first thought was for the safety of his men.

The boiler fires were being lit as *Springfield* (CLG 7), presently flagship of COMSIXTHFLT, was preparing to get underway after a six-month refit period at New York Naval Shipyard.

The pump exploded and the compartment was immediately filled with pressurized steam. ENS Hinton checked to see that the steam valves were closed, then supervised the evacuation of men.

With his face burned, Hinton ducked out of the fireroom briefly for air, then returned to make sure everyone had escaped.

For his quick and heroic action, while acting with complete disregard for his own personal safety and helping to prevent personnel casualties during this incident, Hinton was awarded the Navy and Marine Corps Medal. It was presented by VADM William E. Gentner, Jr., Commander Sixth Fleet.

OVERSEA DELIVERY — *USS Enterprise* (CVAN 65) takes on provisions from *USS Rigel* (AF 58) during replenishment at sea in Mediterranean. More than 330 tons of cargo were transferred in less than two hours.



Essex Golfers Up to Par

Weekend golfers aboard the antisubmarine carrier USS *Essex* (CVS 9) don't have to give up their favorite sport when their ship is at sea. Special Services has set up a golf driving range on the carrier's forecastle where duffers and experts can swing away to their hearts' content.

The project was begun when several of the more distinguished golfers on board — including RADM Donald Gay, Jr., the task group commander, and CAPT W. R. Meyer, *Essex* CO — bemoaned the fact that long at-sea periods were hurting their golf games.

A check around the ship revealed that many other officers and men were devoted linksmen. The result was an allocation of funds by Special Services for a driving net.

The ship's Special Services officer is enthusiastic about the prospects of the driving range. "If all goes well," he says, "we're going to try to get the masters tournament on board the *Essex* next year."

THE WORD

Frank, Authentic Career Information Of Special Interest—Straight from Headquarters

• RIGHTS AND BENEFITS ISSUE—There were so many requests from throughout the Fleet for additional copies of the December 1963 issue (Rights and Benefits) of ALL HANDS that the supply could not meet the demand.

As a result the Bureau of Naval Personnel decided to reprint the contents of that issue as a special NavPers publication.

Copies of NavPers 15885-B, *Rights and Benefits of Navymen and Their Dependents*, are now being distributed to all ships and stations for individual distribution to career enlisted and officer personnel in accordance with BuPers Notice 1700 of 5 May 1964.

Distribution to ships and stations was based on one-half the total complement of each. The publication will be stocked at the Naval Supply Centers at Norfolk, Va., and Oakland, Calif., to provide for new commissionings and to fill additional requests.

If additional quantities of the publication are required after commanding officers have distributed them to their career personnel, they can be requisitioned in lots of 25 copies or less from the appropriate Naval Supply Center.

Requisitions of more than 25 copies should be submitted to the Chief of Naval Personnel (Attn: Pers-114) for approval.

P.S. We're glad that you liked it.

• ANTARCTICA SERVICE MEDAL—Navymen who are eligible to receive the Antarctica Service Medal should inform their commanding officers of their eligibility. Commanding officers can now order the medals from the Naval Supply Depot in Philadelphia.

Custodians of officer and enlisted service records will determine whether or not the applicants for the medal meet all eligibility requirements before the medals are ordered.

If eligibility can't be established from available records, the Navyman who applies for the medal can execute an affidavit to the effect that he fulfilled the eligibility requirements given below after 1 Jan 1946.

• Any Navyman who participated as a member of a U. S. expedition in scientific, direct support or exploratory operations on the antarctic continent is eligible.

The expedition may have been sponsored by the United States or have been a foreign expedition in coordination with the U. S. Antarctic expedition provided the applicant participated under the sponsorship and with the approval of competent U. S. government authority.

• Navymen who participated in flights as aircrew members to or from the Antarctic continent or within the continent in Antarctic support operations are eligible.

• Navymen who served in United States ships operating at least 60 degrees south in support of U. S. operations in Antarctica are eligible.

Bronze, gold and silver clasps are authorized for men who wintered over in Antarctica one, two, three or more times.

Complete details on eligibility for the Antarctica Service Medal can be found in article 531-23 of SecNav Inst. P1650.1C.

Instructions for ordering the medal are in BuPers Notice 1650 of 27 Apr 1964.

• SEAVEY SEGMENT 3-64 — If you're about to ask the Bureau of Naval Personnel about your eligibility for Seavey, save yourself the trouble.

BuPers won't receive the listing of eligibles for Seavey Segment 3-64 until the first part of October and can answer no questions concerning individual eligibility until that time.

Here are some tips, however, on how to determine your own eligibility for Segment 3-64:

Your command undoubtedly has The Enlisted Distribution and Verification Report (BuPers Report 1080-14); look up Column W. This identifies a man's Seavey status by use of a four position code which is explained in the *Instructions for the Naval Manpower Information System*—NavPers 15,642, Part I (Active).

Navymen who are serving overseas and eligible for Seavey during the segment year (particularly from September 1964 through January 1965) should take into account any obligated service they may have.

Personnel on overseas tours who don't have one year of obligated service remaining from the month the overseas tour expires or who didn't



DOGGONE good idea—Pass this copy of ALL HANDS on to nine others and claim the title of 'Navyman's best friend.'

agree, on their Seavey Rotation Card, to extend their enlistment for shore duty, will be reassigned to sea duty or extended by the Fleet EPDO.

PAMIs will prepare and forward rotation data cards for enlisted personnel not already on the Seavey who are in the ratings shown below and whose sea duty commencement dates are no later than the month and year indicated.

Navymen whose advancement date was changed to 25 Jun 1964 by NavAct 2 of May 1964 will be considered to have been advanced on 16 May 1964 so far as Seavey Segment 3-64 is concerned.

SEA DUTY COMMENCEMENT CUTOFF DATES FOR SEAVEY SEGMENT 3-64

Rate	Date
ADCM, ADCS	Feb 63
ADRC, 1, 2, 3, ADRAN	Feb 63
ADJC, 1, 2, 3, ADJAN	Feb 63
ATCM, ATCS, ATC, AT1	Feb 63
AT2	Feb 63
ATR3, ATN3, ATRAN, ATNAN	Feb 63
ATW3, ATWAN	Sep 62
AXCM, AXCS, AXC	Feb 63
AX1, 2, 3, AXAN	Feb 63
AOCM, AOCS, AOC	Feb 63
AO1	Jan 63
AO2, 3, AOAN	Feb 63
AQCM, AQCS, AQC	Feb 63
AQ1, 2, 3, AQAN	Feb 63
ABCM, ABCS	Feb 63
ABEC	Sep 62
ABE1, 2	Sep 61
ABE3, ABEAN	Feb 63
ABFC	Feb 63
ABF1	May 62
ABF2	Oct 62
ABF3, ABFAN	Feb 63
ABHC, 1, 2, 3, ABHAN	Feb 63
AECM, AECS, AEC	Feb 63
AE1, 2, 3, AEAN	Feb 63
AMCM, AMCS, AMSC, AMHC, AMEC	Feb 63
AMS1, 2, 3, AMSAN	Feb 63
AMH1, 2, 3, AMHAN	Feb 63
AME1, 2, 3, AMEAN	Feb 63
PRCM, PRCS, PRC	Feb 63
PR1, 2, 3, PRAN	Feb 63
AG1, 2, 3, AGAN	Feb 63
AKCM, AKCS, AKC	Feb 63
AK1, 2, 3, AKAN	Feb 63
AZCM, AZCS, AZC	Feb 63
AZ1, 2, 3, AZAN	Feb 63
PHCM, PHCS, PHC	Feb 63
PH1, 2, 3, PHAN	Feb 63
PTCM, PTCS, PTC	Feb 63
PT1, 2, 3, PTAN	Feb 63
HMCM, HMCS, HMC	Feb 63
HM1, 2, 3, HN	Feb 63
DTCM, DTCS, DETC	Feb 63
DT1, 2, 3 ,DN	Feb 63

• SHORE TOUR LENGTHS – New shore tour lengths for Navymen in some Group IX ratings were announced in Memorandum Correction Eight to paragraph 7.23 of the *Enlisted Transfer Manual*. Several ratings, however, were omitted from the memorandum and the tour length of the PT rating was incorrectly entered. The enlisted Transfer Manual will be changed to reflect the new tour lengths by Memorandum Correction #9.

For Navymen whose last shore tours expired on or after 1 Feb 64, BuPers Notice 1306 of 2 Apr 64 specified shore tour lengths as follows:

AQC, AQ1, AQ2	42 months
AKCM, AKCS, AKC	48 months
AK1, AK2, AK3, AKAN	42 months
PTCM, PTCS, PTC, PT1, PT2, PT3, PTAN	30 months

• EYESIGHT WAIVERS FOR SUB DUTY—Enlisted Navymen who were ineligible for submarine duty due to eyesight defects may now qualify.

Waivers will be granted to most men whose eyesight is below previous standards but better than 20/100 in each eye. Vision must be correctible to 20/30.

Deck group ratings must meet slightly higher requirements.

• HAZARDOUS DUTY PAY – The portion of last year's pay legislation which increased the number of hazardous duty incentive payments has been implemented by a new directive.

BuPers Notice 7220, dated 28 Apr 1964, draws a general line between those who qualify for multiple payments of hazardous duty money, and those who don't. Those who do are relatively few.

Only men who must perform more than one hazardous duty to carry out their assigned mission may receive the dual incentive payments.

For example, Seal team members must perform parachute jumping and duties involving demolition work in order to accomplish their mission. These men would qualify for two hazardous duty pays.

In any case, entitlement to hazardous duty money must be based on competent orders, as required in the *BuPers Manual* (Art. A-4303). You must meet the minimum requirements for each of the hazardous duties performed, and then perform them both as a necessary part of your unit's mission.

Diving pay does not enter into the matter. Men who receive diving pay are not entitled to hazardous duty pay anyway, since the latter is specifically prohibited by legislation.

QUIZ AWEIGH

Naval history is a subject likely to pop up in almost any advancement examination. How well do you know the Navy's past?

1. Only one Navyman has ever been promoted to the rank of Admiral of the Navy. What was his name?

(a) Farragut.

(b) Dewey.

(c) Truxtun.

2. In 1794 Congress authorized the construction of six frigates, Constitution, Constellation, Congress, United States, President, and Chesapeake. Two are still afloat. They are USS Constitution (Old Ironsides) and:

(a) Chesapeake.

(b) Constellation.

(c) President.



3. Lt. Col. James H. Doolittle was famed during World War II for leading a group of B-25s on bombing missions over Japan from the decks of the carrier:

(a) USS Hornet (CV 8).

(b) USS Wasp (CV 18).

(c) USS Yorktown (CV 5).



4. The two major naval engagements of the Spanish American War were fought at Manila Bay in the Philippines and at:

(a) Trinidad.

(b) Two hundred miles west of the Spanish coast.

(c) Santiago, Cuba.

5. Navy Regulations were first written in 1775 by a man who later signed the Declaration of Independence. He was:

(a) John Adams

(b) Lewis Morris

(c) John Burgoyne

Answers to Quiz Aweigh may be found on page 51.

THE BULLETIN BOARD

Report on Medals and Decorations That May Be New to You

ANYONE WHO WANTS the latest information on those medals and decorations Navymen are entitled to receive should check SecNav Inst. P1650.1C. It incorporates several comparatively recent additions to the list and also deletes some awards which are no longer earned by personnel now in the Navy.

Complete information is given concerning the following awards which were not included earlier in the *Navy and Marine Corps Awards Manual:*

• **The Joint Service Commendation Medal**—This medal was authorized on 25 June 1963 for award in the name of the Secretary of Defense to members of the armed forces who, after 1 Jan 1963, distinguished themselves by meritorious achievement or service while serving in any of the following joint activities assignments—

Office of the Secretary of Defense, Organization of the Joint Chiefs of Staff; Defense Supply Agency; National Security Agency; other Department of Defense agencies or joint activities reporting through Joint Chiefs of Staff; in the headquarters of the unified and specified commands; in the headquarters of joint task forces; joint commands or control groups reporting through the Joint Chiefs of Staff; unified, specified, or subordinate joint commanders to include service components assigned to a joint command for exercise purposes (such as the STRIKE Command), or other joint activities reporting to commanders of unified or specified commands such as military assistance advisory groups or joint missions.

The required achievement or service, while of lesser degree than that required for award of the Legion of Merit, must nevertheless have been accomplished with distinction.

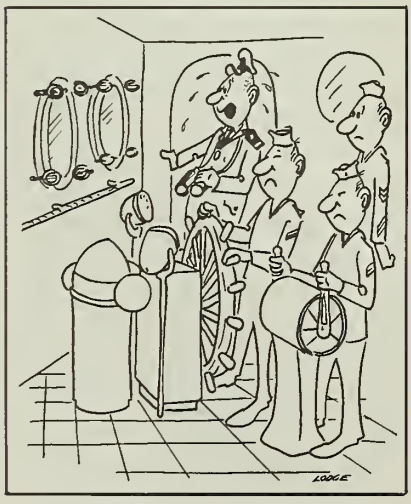
• **Secretary of Navy Commendation for Achievement Ribbon**—Awarded to enlisted and commissioned members of the Navy and Marine Corps, including members of Reserve components, up to the grade of lieutenant commander and major for service performed on or after 1 May 1961.

It may also be awarded to members of other branches of the armed forces of comparable grade while serving with units of the Navy. It is given to officers for professional achievement and to enlisted personnel for professional achievement and/or leadership in instances which warrant recognition greater than is possible by fitness reports or evaluation sheets but which does not warrant a Navy Commendation Medal or a higher decoration.

• **The Armed Forces Expeditionary Medal** — Authorized in December 1961 for award to personnel of the armed forces of the United States who after 1 Jul 1958, participated as a member of U. S. military units in a United States military operation in which, in the opinion of the Joint Chiefs of Staff, personnel of any military department participated in significant numbers.

It is also awarded for any encounter, incident to such participation, foreign armed opposition, or in instances in which military personnel are otherwise placed in such a position that hostile action by foreign armed forces was imminent even though it did not necessarily materialize.

All-Navy Cartoon Contest
LCDR Billups E. Lodge, USN



"That's funny—you'd think they'd have made an admiral's barge a lot sturdier than that."

• **The Antarctica Service Medal**—It was established for any person who, during the period between 1 Jan 1946 and a date which is as yet unestablished, meets any of the following qualifications: A member of a U. S. expedition, participating in scientific, direct support or exploratory operations on the Antarctic continent.

Anyone who participated in a foreign Antarctic expedition in coordination with a United States Antarctic expedition and who was under the sponsorship and approval of competent U. S. government authority.

Any member of the U. S. armed forces who participated in flights as a crew member of an aircraft flying to or from the Antarctic or within the Antarctic continent in support of operations on that continent.

Any member of the U. S. armed forces who served in a U. S. ship operating south of latitude 60 degrees in support of U. S. operations in Antarctica.

Anyone who does not fill the qualifications given above but who participated in a U. S. Antarctic expedition at the invitation of a participating U. S. agency.

• **The United Nations Medal**—Authorized by the Secretary General of the United Nations on 30 Jul 1959 to be awarded to armed forces personnel who served with or for the UN in observing truce agreements or maintaining order.

Personnel attached to and serving with these organizations are eligible for the medal: United Nations Observation Group in Lebanon, United Nations Truce Supervision Organization in Palestine and the United Nations Military Observer Group in India and Pakistan.

• **The Naval Reserve Meritorious Service Ribbon**—This may be awarded to an enlisted Reservist who, during any four consecutive years sub-

sequent to 1 Jul 1958, fulfills the following minimum service requirements and receives no evaluation mark less than 3.0 (if marks are assigned).

He must perform four periods of active duty for training of not less than 14 days each and attend 90 per cent of all scheduled drills of a Naval Reserve unit or perform authorized equivalent instruction or duty.

The SecNav Instruction quotes pertinent laws concerning awards which mean money in one form or another to those who receive them. Although the laws are not new, they bear repeating. Briefly, they are:

• *The Medal of Honor.* As almost everyone knows, holders of this decoration are eligible to receive a monthly pension of $100 upon reaching age 50. The pension is not taxable and cannot be attached for any reason.

(The sons of Medal of Honor winners are eligible for entry into any of the service academies without regard to quotas and the wearers of the decoration are themselves eligible for travel on military aircraft within the United States.)

• *Extraordinary heroism.* Any enlisted man who has been credited by the Secretary of the Navy with extraordinary heroism in line of duty is entitled to an increase of 10 per cent in his retainer pay when he is transferred to the Fleet Reserve.

• *Advancement credits.* As many as 10 points are given to Navy personnel who hold certain awards in arriving at a final multiple for purposes of advancement in rating. If you've earned the Good Conduct Medal or other medals, check your eligibility in the Manual.

Other information included in the Instruction covers judicious use of awards, authority to establish awards, miscellaneous laws pertaining to awards, information on the Navy Department's Board of Decorations and Medals, issuance of awards, personnel eligible for awards and regulations concerning the wearing and replacement of awards.

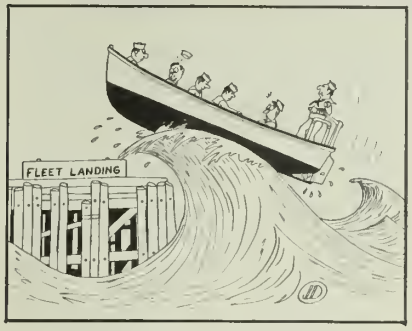
The Instruction also includes lists of personal U. S. decorations with the regulations governing their use; unit awards; United States non-military decorations; campaign and service awards; foreign awards and non-U. S. service awards to United States personnel; United States awards to foreign personnel and awards for marksmanship.

There are also sample letters of recommendation and citations given in an annex to the instruction.

Many Navymen will be interested in consulting the lists of ships and units which are eligible for a Presidential Unit Citation, a Navy Unit Commendation, the Antarctica Service Medal and the Navy and Marine Corps Expeditionary Medal.

They are all listed with the dates during which eligibility can be established.

John L. Draves, QM2, USN



"Could I have your attention please—we're coming in for a landing."

Boilermen All Steamed Up Over New Generator Course

Classroom training in operation and maintenance of the super-charged steam generator that is being installed in new DEs is underway as an extension of the Boilerman school at Philadelphia, Pa.

The six-week course is open to graduates of Boilerman "B" school. Classes convene quarterly.

The pressure fired steam generator is one of the latest developments in marine steam engineering, based on recent advances in metallurgical and aerodynamic technology.

Students of the new course's first class were graduated last March. Included in the class were the engineering officer and 10 Boilermen of USS *Garcia* (DE 1040).

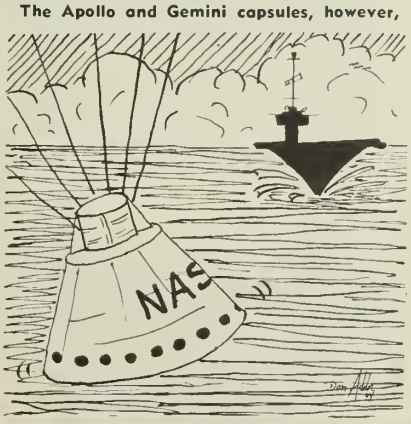
NOW HERE'S THIS

Intrepid *Is Big-League Catcher*

Representatives of the National Aeronaucal and Space Agency (NASA) were on board USS Intrepid (CVS 11) recently ta evaluate the role of the Navy's aircraft carriers in recovery operations when the Apollo and Gemini space capsules splash on their return to earth.

Carriers in general are old hands ot recovering space capsules from the ocean. For instance, Intrepid, herself, recovered the capsule in which Navyman Scott Carpenter returned to earth.

The Apollo and Gemini capsules, however, present new problems of weight. The Gemini capsule, designed to carry two men to a rendezvous in space with an orbiting satellite, will weigh 4800 pounds. The Apallo space capsule for carrying a man to the moon and back will weigh a whapping 10,000 pounds.



The use of aircraft carriers for recavery of the two types of capsules is favored because of their operational flexibility.

Two recovery approaches were used by Intrepid. The first called for a motar whaleboat to be dispatched from which gunnery personnel attached a two-and-one-half-inch nylon line to the capsule. The capsule was then drawn to the carrier by manpawer or winch and haisted on baard the number three elevatar by means of the boat and airplane crane.

The ather approach, which could best be used in rough weather, used two UDT swimmers wha put a flotation collar on the capsule then attached a line (which was shot to them fram Intrepid) by which the capsule was tawed within reach af the carrier's crane.

After studying motion pictures made of the test recavery aperations, NASA experts decided that, with a few modificotions, the procedure wauld da nicely.

—Richard L. Earl, ENS, USN

Armed Forces Expeditionary Medal: Ships, Units and Dates

NAVYMEN who participated in the operations at Berlin, Lebanon, Quemoy and Matsu Islands, Taiwan Strait, the Congo, Laos and Vietnam are eligible to receive the Armed Forces Expeditionary Medal and are authorized to purchase and wear the ribbon bar.

To qualify, they must have served in any of the ships or with any of the units listed below during the periods shown.

Members of rear echelons, transients, observers and personnel assigned for short periods of TAD are normally not considered eligible for the award. However, consideration will be given where the local commander certifies to the Chief of Naval Personnel that the individual made a contribution in any given area.

Personnel who require evidence that they were members of an eligible ship or unit during the periods of eligibility, may request the evidence from the Chief of Naval Personnel. Requests for additions or corrections to the lists should be addressed to the Chief of Naval Operations (Op 09B2E).

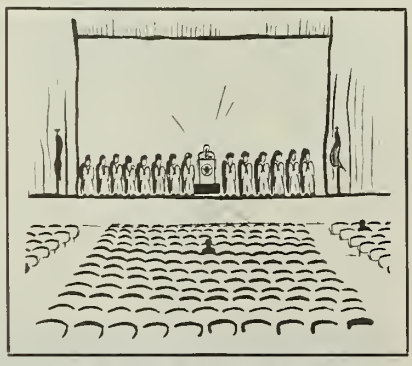
Units serving in Vietnam are not listed below for security reasons. However, personnel who have served there for 30 days and those who, in the future serve there for 30 days or more, are eligible to wear the ribbon.

A list of eligibles for the Lebanon operation, based on SecNav Inst. P1650.1C, was previously published in ALL HANDS and is repeated below with the alterations given in Change One to the instruction. Only the list of ships and units taking part in the Cuban operation remains to be published. Inquiries about eligibility for Cuban service should not be submitted until the list is issued, as such inquiries cannot be answered at this time.

LEBANON OPERATION
1 July-1 November 1958

Abbot (DD 629)—20 August-22 September
Adroit (MSO 509)—15 August-4 September
Aggressive (MSO 422)—15-23 August; 2-9 September
Alcor (AK 259)—11-12 August; 21-26 August
Aldebaron (AF 10)—9-17 August
Antores (AK 258)—6-7 October
Atokopo (ATF 149)—29-30 August
Aucilla (AO 56)—22-23 August; 2-4 September
Borry (DD 933)—17-25 July; 29 July-1 August; 11-20 August; 27-31 August
Bosilone (DDE 824)—26 July-11 August
Boston (CAG 1)—15 July-1 August; 9-21 August; 2-5 September
Combrio (APA 36)—29 September-18 October
Copricornus (AKA 57)—13-24 July; 5-23 August; 16 September-1 October
Charles H. Roon (DD 853)—20-26 August
Chewoucon (AOG 50)—22 October
Chilton (APA 38)—17-23 July; 7-22 August; 5 September-1 October; 16-25 October
Chukowon (AO 100)—29 August-12 September
Cone (DD 866)—17 July-2 August;11-21 August; 2-7 September
Corregidor (CVU 58)—22 July
Cromwell (DE 1014)—26-31 July; 11-22 August; 31 August-14 September
Domato (DDE 871)—1-9 August
Deoley (DE 1006)—26-31 July; 11-22 August; 31 August-14 September
Denebolo (AF 56)—19-28 September
Des Moines (CA 134)—17 July-10 August; 23-29 August
Essex (CVA 9)—16 July-1 August; 11-20 August
Fidelity (MSO 443)—15-23 August; 2-9 September
Forrest B. Royol (DD 872)—20-26 August
Fort Snelling (LSD 30)—17-23 July; 7-22 August; 5 September-1 October; 16-25 October
Fremont (APA 44)—18 July-6 August; 23 August-6 September; 14-16 September
Geiger (T-AP 197)—5 August
General George M. Rondoll (AP 115)—2-3 August
General Leroy Eltinge (T-AP 154)—3-5 October; 23-24 October
General R. M. Blatchford (T-AP 153)—13-17 October
Hoiley (DD 556)—17 July-21 August; 4-6 September
Hartley (DE 1029)—1-11 August; 22-31 August; 16-17 September
Hyades (AF 28)—29-30 August; 5-9 September
John Willis (DE 1027)—16-26 July; 11-21 August; 31 August-16 September
Jonas Ingrom (DD 938)—21-26 September
Joseph K. Toussig (DE 1030)—17 July-10 August; 22-31 August
LCU 1466—15 July-3 October; 16-25 October
LCU 1467—17-21 July; 5-23 August; 16-30 September
LCU 1469—17-21 July; 5-23 August; 16-30 September
LCU 1474—29 September-18 October
LCU 1486—29 September-18 October
LCU 1491—17 July-16 September
LCU 1492—18-31 July; 1-6 August; 23-31 August; 1-7 September; 14-16 September
LCU 1608—15 July-3 October; 16-25 October
LCU 1609—29 September-18 October
Leory (DDR 879)—1-10 August; 19-31 August
Lester (DE 1022)—30 July-11 August; 22-31 August; 16-17 September
Morias (AO 57)—10 August-2 September
Mottobesset (AOG 52)—22-25 July; 14-16 August; 23-27 September; 13 October

All-Navy Cartoon Contest
L. B. Honsen, CP, USN



". . . anybody else out there sleepy!"

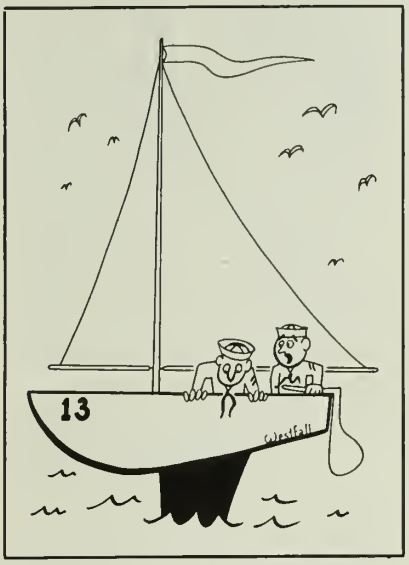
McGowan (DD 678)—15 July-1 August; 11-20 August; 2-7 September
McNair (DD 679)—15 July-1 August; 11-20 August; 31 August-12 September
Mercury (AKS 20)—22-25 August; 4-9 September; 23-26 September
Meredith (DD 890)—31 August-7 September
Miller (DD 535)—17 July-21 August; 4-6 September
Monrovia (APA 31)—14-24 July; 5-22 August; 16 September-1 October
Mount McKinley (AGC 7)—18-31 July
Muliphen (AKA 61)—18 July-6 August; 23 August-6 September; 14-16 September
New (DDE 818)—17 July-1 August; 11 August
Newport News (CA 148)—21-27 September
Nimble (MSO 459)—17 July-15 August; 9 September-2 October
Noa (DD 841)—17-24 July
Oglethorpe (AKA 100)—29 September-18 October
Olmsted (APA 188)—18 July-6 August; 23-30 August; 15-16 September
Pawcotuck (AO 108)—26-30 September; 13-18 October
Pinnacle (MSO 462)—17 July-2 August; 21 August-2 October
Plymouth Rock (LSD 29)—17-21 July; 5-23 August; 16-30 September
Pocono (AGC 16)—17 July-25 October
Power (DD 839)—21-24 September
Rondolph (CVS 15)—24-26 September
Rich (DDE 820)—17 July-11 August
Rigel (AF 58)—15 October
Robert L. Wilson (DDE 847)—17 July-11 August
Rockbridge (APA 228)—16-23 July; 7-22 August; 5 September-1 October; 16-25 October
Rooks (DD 804)—17-25 July; 11-14 August
Sogocity (MSO 469)—17 July-2 August; 21 August-2 October
Samuel B. Roberts (DD 823)—20-24 August; 2-10 September
San Marcos (LSD 25)—29 September-18 October
Sorotogo (CVA 60)—17-25 July; 29 July-11 August; 19 August-7 September
Severn (AO 61)—25-29 July; 10-27 August
Shosto (AE 6)—22 July-11 August; 20 August-1 September
Shenandooh (AD 26)—22-24 July

Skill (MSO 471)—17 July-15 August; 9 September-2 October
Spiegel Grove (LSD 32)—18 July-6 August; 23 August-7 September; 14-16 September
Stolwart (MSO 493)—15 August-2 September
Steinaker (DDR 863)—17-25 July; 30 July-16 August; 31 August-14 September
Stribling (DD 867)—17-23 July
Suffolk County (LST 1173)—29 September-18 October
Toconic (AGC 17)—14 July-8 October
The Sullivons (DD 537)—14 July-1 August; 15-20 August; 27 August-7 September
Troverse County (LST 1160)—14-24 July; S-23 August; 16 September-1 October
Tripoli (CVU 64)—1S October
Turner (DDR 834)—17 September-7 October
Upshur (T-AP 198)—1-3 August
Von Voorhis (DE 1028)—17 July-11 August; 22-31 August; 16-17 September
Vermilion (AKA 107)—16-23 July; 9-22 August; 5 September-1 October; 16-25 October
Vesole (DDR 878)—17 July-1 August; 11-20 August; 16-17 September
Woccomaw (AO 109)—26 July-11 August; 5-8 September; 19-23 September
Wodleigh (DD 689)—14-24 July; 6-11 August; 19 August-7 September
Walworth County (LST 1164)—14-24 July; 5-23 August; 16 September-1 October
Wasp (CVS 18)—16 July-11 August; 21-31 August; 16-17 September
William C. Lowe (DD 763)—21 September-6 October
William M. Wood (DDR 715)—19-23 July; 28 July-4 August; 16 August-3 September
Wrongell (AE 12)—16-25 July; 30-31 July; 15-22 August; 2-11 September
York County (LST 117S)—29 September-18 October

UNITS

AIR TRANSPORT SQUADRON 24 (VR 24)—Only those oir crews which actually landed in Lebonon during the period 14 July-25 October.
ALUSNA BEIRUT—1 July-1 November
CINCSPECOMME—16 July-23 October
COMCARDIV 6—17-2S July; 29 July-11 August; 19 August-7 September
COMCARDIV 14—16 July-11 August; 21-31 August; 16-17 September
COMCORTRON 10—26-31 July; 11-22 August; 31 August-14 September
COMCORTRON 14—17 July-11 August; 22-31 August; 16-17 September
COMCRULANT—21-27 September
COMDESDIV 61—17 July-2 August; 11-21 August; 2-7 September
COMDESDIV 62—17-2S July; 30 July-16 August; 31 August-14 September
COMDESDIV 102—20 August-22 September
COMDESDIV 201—17-25 July; 29 July-1 August; 11-20 August; 27-31 August
COMDESDIV 202—14-24 July; 28 July-1 August; 11-20 August; 2-7 September
COMDESDIV 361—17 July-11 August
COMDESDIV 362—17 July-11 August
COMINDIV 44—15 August-4 September
COMINDIV 84—17 July-15 August; 9 September-2 October
COMPHIBGRU 4—17 July-3 October
COMSIXTHFLT—17 July-10 August; 23-29 August
COMSTSMEDSUB-AREA REP BEIRUT—30 July-25 October

All-Novy Cortoon Contest
Carl R. Westfall, SN, USN



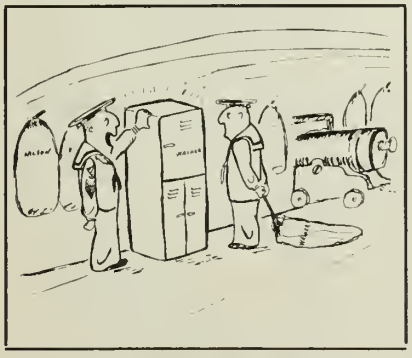
"I'd soy either we're in shollow water or she rides just a bit high."

COMTRANSPHIBRON 2—17-23 July; 9-22 August; 5 September-1 October; 16-25 October
COMTRANSPHIBRON 4—18-31 July; 23 August-6 September; 14-16 September
COMTRANSPHIBRON 6—14-24 July; S-22 August; 16 September-1 October
COMTRANSPHIBRON 8—29 September-18 October
DETACHMENT, Patrol Squodron 10 (VP 10)—Only those oir crews which octually landed in Lebonon during the period 25 July-29 August.
DETACHMENT, Potrol Squadron 21 (VP 21)—Only those air crews which actually londed in Lebonon during the period 11 August-24 September

QUEMOY AND MATSU ISLANDS—23 August 1958-1 June 1963

Benner (DDR 807)—4-21 September 1959; 29 September-10 October 19S9
Broine (DD 630)—S March-14 April 1962
Brinkley Bass (DD 887)—1-16 Moy 1960; 28 May-8 June 1960

All-Navy Cortoon Contest
LTJG H. G. Wolker, USN



"What are you—some kind of nut?"

Brown (DD S46)—12-27 October 1960; 2-21 November 1960
Chevalier (DDR 805)—31 December 19S8-1 January 1959; 8-16 January 1959
Cogswell (DD 651)—5 March-14 April 1962
Collett (DD 730)—28 September-2 October 1959; 8-14 October 1959; 18-30 October 1959; 27-30 August 1962; 8-28 September 1962
Cowell (DD 547)—S December 1959-S January 1960; 28 March-1S May 1961
Cushing (DD 797)—30 November 1959-S Jonuory 1960
DeHoven (DD 727)—28 September-21 October 1959; 27-31 October 1959; 31 October-2 December 1961
Dennis J. Buckley (DDR 808)—25 November-27 December 1959
Duncan (DDR 874)—3-9 May 1960; 1S May-4 June 1960; 31 October-2 December 1961
Edson (DD 946)—5-8 March 1960
Everett F. Larson (DDR 830)—23 July-4 September 19S9
Eversole (DD 789)—3-25 April 1959; 1-3 May 1959; 8 June-12 July 1960; 20 July-5 August 1961; 7-22 August 1961
Floyd B. Parks (DD 884)—6-9 September 1960; 16 September-13 October 1960; 25 September-1 November 1961
Fort Marion (LSD 22)—1S September-S October 1958
Frank Knox (DDR 742)—6-7 March 1960; 15 March-4 April 1960; 18-28 April 1960
George K. MocKenzie (DD 836)—4 February-S Morch 1962
Gregory (DD 802)—21 November-19 December 1960; 27 December 1960-5 Jonuary 1961; 13 April-16 May 1962; 19-26 Moy 1962
Gurke (DD 783)—12-2S June 1961; S-20 July 1961
Halsey Powell (DD 686)—21 Jonuory-19 February 1961
Hamner (DD 718)—31 December 1958-9 January 1959; 20-25 January 1959; 1-15 February 1959; 12 May-11 June 1961
Honson (DDR 832)—4-13 Jonuory 1960
Harry E. Hubbard (DD 748)—10-19 July 1960; 26 July-12 August 1960; 25 May-26 June 1962
Hassayampa (AO 145)—1-2 July 1959; 10-11 July 19S9.
Henry W. Tucker (DDR 875)—8 June-9 July 1960; 1-13 August 1960; 19-20 August 1960; 22 August-16 September 1960
Herbert J. Thomas (DDR 833)—7-9 Morch 1960
Hooper (DE 1026)—2 Jonuory-5 February 1959; 12 Februory-7 Morch 1959
Hopewell (DD 681)—12-20 October 1960; 30 October-3 November 1960; 9-21 November 1960
Hull (DD 945)—7-22 September 1960; 29 September-6 October 1960; 8-13 October 1960; 25 September-1 November 1961
Isherwood (DD 520)—21 November-9 December 1960; 21 December 1960-5 Jonuory 1961
James E. Kyes (DD 787)—3 April-3 May 1959; 7 June-11 July 1960
Jarvis (DD 799)—30 October-1 December 1959
John A. Bole (DD 755)—4-15 Jonuory 1960
John R. Croig (DD 885)—7-16 September 1960; 22 September-13 October 1960; 24 September-16 October 1961; 20 October-1 November 1961

Leanard F. Mason (DD 852)—5 February-6 March 1962
Lyman K. Swenson (DD 729)—6 August-4 September 1959; 29 August-28 September 1962
Mansfield (DD 728)—20-30 October 1959
Marshall (DD 676)—4 January-12 February 1961
McKean (DDR 784)—25 Moy-4 June 1962; 9-26 June 1962
Marton (DD 948)—15 May-1 June 1961; 6-11 June 1961
Mullany (DD 528)—22 November-1 December 1960; 11 December 1960-11 January 1961; 13 April-26 May 1962
Oak Hill (LSD 7)—8-20 October 1958
Orleck (DD 886)—8-12 June 1960; 28 June-12 July 1960; 20 July-6 August 1961; 9-21 August 1961
Picking (DD 685)—7 February-8 March 1960; 10 December 1961-12 January 1962
Parterfield (DD 682)—19 February-28 March 1961
Prichett (DD 561)—14-20 December 1959; 27 December 1959-5 January 1960; 18 July-7 August 1962; 14-20 August 1962
Rowan (DD 782)—12 June-21 July 1961
Rupertus (DD 851)—21 August-25 September 1961; 4 February-5 March 1962
Shelton (DD 790)—2-12 September 1962; 16-28 September 1962
Shields (DD 596)—11 February-28 March 1961
Somers (DD 947)—12 June-21 July 1961
Sautherland (DDR 743)—9-14 April 1960
Staddard (DD 566)—5 March-14 April 1962
Theodore E. Chandler (DD 717)—31 December 1958-7 January 1959; 15 January-11 February 1959; 1 May 1960; 8 May-8 June 1960
Trathen (DD 530)—30 Octaber-1 December 1959; 18 July-9 August 1962; 18-25 August 1962
Turner Joy (DD 951)—10-27 July 1960; 3-13 August 1960
Twining (DD 540)—19 February-28 March 1961
Uhlmann (DD 687)—12-16 October 1960; 22 Octaber-8 November 1960; 12-21 Navember 1960
Washtenaw County (LST 1166)—5-6 September 1958
Wilkinson (DL 5)—30 October-1 December 1959

TAIWAN STRAIT—23 August 1958-1 January 1959

Bennington (CVA 20)—12 October-2 November 1958; 24 Navember-3 December 1958
Charles H. Roan (DD 853)—20-27 September 1958
Edmonds (DE 406)—1 December 1958-1 January 1959
Farrest Royal (DD 872)—20-27 September 1958
Hancock (CVA 19)—2-9 September 1958
Hassayampa (AO 145)—22-24 November 1958; 27 November 1958-30 December 1958
Jarvis (DD 799)—21-29 October 1958; 2-22 December 1958; 29 December 1958-1 January 1959
Lexingtan (CVA 16)—27 August-2 September 1958; 3-16 September 1958; 26 September-14 October 1958
Midway (CVA 41)—13-28 September 1958; 21-30 October 1958; 11-15 Navember 1958; 30 November-4 December 1958

Astronaut Joins Divers

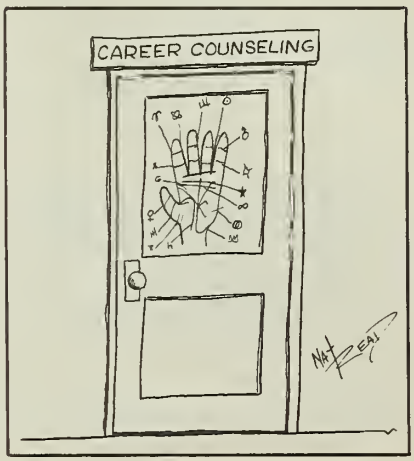
Lieutenant Commander M. Scott Carpenter, second astronaut to orbit the earth, will join four other Navymen during their final week in the Sealab. An interest in the problems of life in an ocean environment prompted him to volunteer. (See p. 6).

He will assist in the collection and evaluation of scientific data.

The original participants are: Lieutenant Robert E. Thompson, Medical Corps; Gunner's Mate First Class Lester E. Anderson; Chief Quartermaster Robert A. Barth; Chief Hospital Corpsman Sanders W. Manning.

Mount Baker (AE 4)—6-12 September 1958
Peacock (MSC 198)—10 September-16 October 1958
Pine Island (AV 12)—23 August-16 October 1958; 22-30 October 1958; 5-15 November 1958
Princeton (CVS 37)—27 August-1 September 1958; 3-14 September 1958
Shangri-La (CVA 38)—1 September 1958; 3-27 September 1958; 15-16 October 1958; 21-29 October 1958
Ticanderaga (CVA 14)—12-15 November 1958; 20-22 November 1958; 5-8 December 1958; 29 December 1958-1 January 1959
Tom Green County (LST 1159)—3-10 September 1958
Trathen (DD 530)—21 October-1 November 1958; 2-17 December 1958; 23 December 1958-1 January 1959
Vireo (M5C 205)—10 September-4 November 1958
Warbler (MSC 206)—10 September-4 November 1958
Whippaorwill (MSC 207)—10 September-4 November 1958
Wilkinson (DL 5)—1 December 1958-1 January 1959
Zelima (AF 49)—30-31 October 1958; 8-13 November 1958; 2-13 December 1958

All-Navy Cartoon Contest
ENS Nat B. Read, USNR



CONGO—14 July 1960-1 September 1962

General R. Blatchford (T-AP 153)—26 February-1 March 1961; 27 April-2 May 1961; 20-22 December 1961
Donner (LSD 20)—4-5 November 1961
General L. Eltinge (T-AP 154)—7-15 March 1961
Graham County (LST 1176)—26 January-2 February 1961; 23 February-2 March 1961; 22 March 1961
Hermitage (LSD 34)—22 January-2 February 1961; 20 February-2 March 1961
Suffolk County (LST 1173)—4-8 November 1961
Whitfield County (LST 1169)—31 Octaber-3 November 1960
Windham County (LST 1170)—31 October-3 November 1960
MSTS Representative, CONGO — Personnel permonently assigned who were present for at leost 30 consecutive days during the period 21 February-16 October 1961.

LAOS—19 April 1961-7 October 1962

Calvert (APA 32)—27 April-6 May 1961
Fort Marion (LSD 22)—27 April-6 May 1961
Hassayampa (AO 145)—22-29 April 1962; 17-18 May 1962
Ticonderoga (CVA 14)—26-30 September 1961
Vernon Caunty (LST 1161)—30 May-11 June 1962
Washtenaw County (LST 1166)—7-17 June 1962
Whitfield County (LST 1169)—7-17 June 1962
Windham County (LST 1170)—3-15 June 1962

VIETNAM—1 July 1958 to date to be announced

Alvin C. Cockrell (DE 366)—25 March-1 April 1962; 23 April-8 May 1962
Bennington (CVS 20)—16-19 December 1960; 21-22 December 1960; 3-7 January 1961; 14-18 May 1962
Charles E. Brannon (DE 446)—25 March-9 April 1962; 5-18 May 1962
Breton (T-AKV 42)—22-23 September 1960; 5-6 April 1961; 21-23 May 1961; 14-16 January 1962; 3-4 March 1962; 11-17 July 1962
Caliente (AO 53)—16 March 1962; 16 April 1962; 18 Moy 1962
Conflict (MSO 426)—21-28 April 1962; 12-25 May 1962; 18 June-5 July 1962
Conquest (MSO 488)—20 December-1961-16 January 1962; 29 January-17 February 1962
Coak (APD 130)—6-28 January 1962
Coral Sea (CVA 43)—29 April-9 May 1961; 12-19 January 1962; 24-27 January 1962
Core (T-AKV 41)—24-25 November 1960; 11-12 December 1961; 6 July 1962
Dynamic (MSO 432)—21 February-7 March 1962; 26 April-14 May 1962; 23 May-14 June 1962; 23 June-5 July 1962
Edmonds (DE 406)—1-12 April 1962
Endurance (MSO 435)—17-28 April 1962; 10 May-1 June 1962; 12 June-5 July 1962
Engage (MSO 433)—4 July-1 August 1962
Epping Forest (LSD 4)—11-23 January 1962
Esteem (MSO 438)—20 December 1961-16 February 1962
Fortify (MSO 446)—4-15 July 1962; 20 July-1 August 1962
Gallant (MSO 489)—20 December 1961-7 February 1962

Hancock (CVA 19)—16-20 May 1962
Illusive (MSO 448)—5-31 January 1962
Impervious (MSO 449)—12 July-1 August 1962
Implicit (MSO 455)—21 February-7 March 1962; 26 April-12 May 1962; 8-27 June 1962
Manatee (AO 58)—27-30 September 1961; 15-16 October 1961
Marsh (DE 699)—25 March-1 April 1962; 22 April-6 May 1962
McGinty (DE 365)—8-20 April 1962
Midway (CVA 41)—28 March-7 April 1961
Persistent (MSO 491)—20 April-12 May 1962; 27 May-17 June 1962
Pledge (MSO 492)—20 December 1961-2 January 1962; 18 January-17 February 1962
Private Joseph F. Merrell (T-AK 275)—25-27 December 1959; 11-12 May 1960; 26-28 December 1960; 19-24 June 1961; 21-24 August 1961; 30 May-5 June 1962
Schuyler Otis Bland (T-AK 277)—21-25 October 1961; 15-21 January 1962
Sergeant Andrew Miller (T-AK 242)—17-19 February 1961; 18-19 May 1961; 6-8 August 1961; 12-15 March 1962
Sergeant Jack J. Pendleton (T-AK 276)—12-14 October 1960; 8-13 February 1961; 28 February-3 March 1962; 24-25 June 1962
Sergeant Truman Kimbro (T-AK 254)—18-20 June 1960; 28-31 October 1960; 6-8 April 1961
Taluga (AO 62)—3-5 March 1962; 10-12 March 1962; 20-26 April 1962
Vammen (DE 644)—25 March-9 April 1962; 5-18 May 1962
Walton (DE 361)—2-28 April 1962
Whitehurst (DE 634)—5-24 March 1962; 14-26 April 1962
Wiseman (DE 667)—12-20 April 1962; 15-21 May 1962

***Military Assistance Advisory Graup, Vietnam**
***U.S. Military Assistance Command, Vietnam**
***Assistant Naval Attache/Assistant Naval Attache for Air, American Embassy, Saigon, Vietnam**

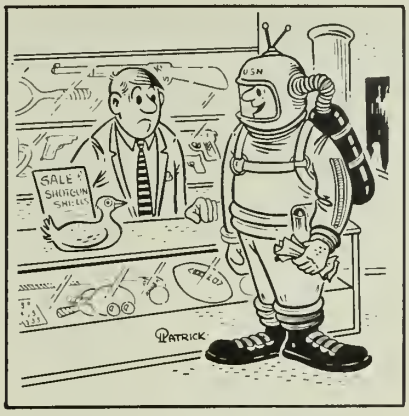
***USN and USMC personnel permanently assigned who were present for at least 30 consecutive days during the period for which Vietnam is designated eligible for Armed Forces Expeditionary Medal.**

NOTE: Several units now present in Vietnam are not listed for security reasons. Since the Secretary of the Navy has previously authorized wear of the Armed Forces Expeditionary Medal by personnel in the country, there is no need to promulgate a classified eligibility list. Appropriate service record entries will substantiate individual eligibility.

New Correspondence Course

A new correspondence course dealing with electronics has been issued and is now available to both officers and enlisted men through the Naval Correspondence Course Center, Scotia, N. Y.

The new course is *OCC/ECC Naval Electronics,* Part III, NavPers 10447 (Confidential). It supersedes *OCC Naval Electronics,* Part III, NavPers 10932-1.



"Fifty miles of goad fishing line."

List of Motion Pictures Now Available to Ships And Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

The Texans (2619); Joan Bennett, Randolph Scott (Re-Issue).

The Paleface (2620); Bob Hope, Jane Russell (Re-Issue).

Blaze of Noon (2621) Melodrama: Ann Baxter, William Holden (Re-Issue).

Flight From Ashiya (2622) (C) (WS): Melodrama; Yul Brynner, Richard Widmark.

Kissin' Cousins (2623) (C) (WS): Musical Comedy; Elvis Presley, Arthur O'Connell.

Golden Arrow (2624 (C) (WS): Melodrama; Tab Hunter, Rosanna Padesta.

The Strangler (2625): Melodrama; Victor Buono, Diane Sayer.

The Story of Dr. Wassell (2626); Gary Cooper, Laraine Day (Re-Issue).

Two Years Before The Mast (2627); Alan Ladd, Brian Donlevy (Re-Issue).

Monsieur Beaucaire (2628); Bob Hope, Joan Caulfield (Re-Issue).

ANWERS TO QUIZ AWEIGH

Quiz Aweigh may be found on page 45.

1. (b) Dewey.
2. (b) Constellation.
3. (a) USS Hornet (CV 8).
4. (c) Santiago, Cuba.
5. (a) John Adams.

Road to Singapore (2629); Bing Crosby, Dorothy Lamour (Re-Issue).

Samson and the Slave Queen (2630) (C) (WS): Melodrama; Alan Steel, Pierre Brice.

America, America (2631): Drama; Stathis Giallelis, Frank Wolff.

Hide and Seek (2632): Melodrama; Curt Jurgens, Janet Munro.

F.B.I. Code 98 (2633): Suspense Drama; Jack Kelly, Ray Danton.

A Star is Born (2634); Judy Garland, James Mason (Re-Issue).

The Major and the Minor (2635); Ginger Rogers, Ray Milland (Re-Issue).

Spawn of the North (2636); George Raft, Dorothy Lamour (Re-Issue).

The Plainsman (2637); Gary Cooper, Jean Arthur (Re-Issue).

The Victors (2638) (WS): Drama; George Hamilton, Melina Mercouri.

Nightmare (2639) (WS): Suspense Drama; David Knight, Moira Redmond.

Paris When It Sizzles (2640) (C): Comedy; William Holden, Audrey Hepburn.

Fury At Smuggler's Bay (2641): Melodrama; Peter Cushing, Michele Mercer.

Lawrence of Arabia (2642) (C) (WS); Drama; Peter O'Toole, Alec Guinness.

Seven Faces of Dr. Lao (2643) (C): Fantasy; Tony Randall, Barbara Eden.

The Bay of St. Michel (2644) Mystery Drama; Keenan Wynn, Mai Zetterling.

Dark Purpose (2645) (C): Suspense Melodrama; Shirley Jones, George Sanders.

TV PROGRAMS

5346: TV-1 *Dick Powell Show*—Run Till It's Dark. TV-2 *The Untouchables*—The Antidote.

5347: TV-1 *Dick Powell Show*—In Search of a Son. TV-2 *The Untouchables*—Murder Under Glass.

5348: TV-1 *Dick Powell Show*—Project X. TV-2. *The Untouchables* The Otto Frick Story.

5349: TV-1 *Dick Powell Show*—Borderline. TV-2 *The Untouchables* The Larry Fay Story.

5350: TV-1 *The Untouchables*—Big Train (Part 1). TV-2 *The Untouchables*—Big Train (Part II).

Moving Ahead with the Submarine Navy? Check These Courses

COURSES ARE NOW available for Navymen who want assignment to an advanced design submarine or a position of increased responsibility in other submarines for which special pay is authorized under the Uniformed Service Pay Act of 1963.

To be eligible for submarine pay for this type of schooling, prospective students must be designated qualified in submarines and have competent orders for duty under instruction to any of the following.

- Guided Missiles School, Dam Neck, Va., for SSN/SSBN equipments, and for MT "A."
- Nuclear Power School, Naval Training Center, Bainbridge, Md.
- Nuclear Power School, Mare Island Naval Shipyard, Vallejo, Calif.
- Nuclear Power Training Unit, National Reactor Test Station, Idaho Falls, Idaho.
- Nuclear Power Training Unit, West Milton Site, Schenectady, N. Y.
- Nuclear Power Training Unit, Windsor, Conn.
- All PCO/PXO submarine courses.
- Atomic Power Laboratory, Pittsburgh, Pa.
- Navy Factory Training Courses for *Subroc.*
- Navy Factory Training Courses for FBM/SSBN/SSN.
- Duty under instruction at BuShips (Code 1500).
- FBM SUBTRACENTER, Charleston, S.C.
- FBM SUBTRAFAC, Pearl.

Note: Courses subject to change.

COURSES AT U.S. SUBMARINE SCHOOL, NEW LONDON:

MK 112 Officers' Familiarization Course.

MK 113 MOD 2 FCS Officers' Familiarization Course.

MK 113 MOD 5 FCS Officers' Familiarization Course.

L-5 Submarine Gyro Compass MK 19.

L-8 Automatic Steering and Diving Control SSN/SSBN.

L-12 Sound and Vibration Analyses Course.

L-14 Atmosphere Analyzer (M 12).

C-2 Special Technology.

C-11 Submarine Sonar Subjective Analysis.

C-24 AN/WPN-4 Loran "C" Receiver.

Submarine Radioman Package Course.

W-S Torpedo Operational Maintenance (MK 45).

X-5 Nuclear Medicine Technician.

N-11 Submarine High Pressure Air Compressor.

N-12 Vapor Compressor Distilling Unit 2000 GPD.

M-14 Trim Pump and Associated Valves and L. P. Blower (SSN/SSBN).

M-15 Refrigeration and Air Conditioning (SSN equip-chilled water cooling).

M-16 Lithium Bromide Air Conditioning.

M-17 Oxygen Generator.

M-18 Carbon Dioxide Scrubber and Carbon Monoxide Burner.

M-19 High Pressure Air Valves.

M-22 Stainless Steel Welding (Maintenance of qualification-requalification).

M-2S Stainless Steel Welding (Maintenance of qualification-requalification).

M-26 Nuclear Power Plant Operators Welding.

SSN/SSBN Auxiliaryman Package Course.

P-1 MTRE MK 3 Operation and Maintenance.

P-3 Polaris MK 1 Guidance System.

P-4 MK 80 FC System.

P-5 MK 80 FC System Optical Alignment.

P-6 FBM System Interface.

P-7 FBM Weapons Systems Test Equipment.

P-8 MK 16 Launcher Circuitry and Pressurization and Ejector Group Maintenance.

P-9 MK 17 Launcher Circuitry and Pressurization and Ejector Group Maintenance.

P-10 A1P Missile Maintenance.

P-11 A2P Missile Maintenance.

P-12 ULCER II MK 15 MODO Operation and Maintenance.

P-30 598 System Operations.

P-31 608 System Operations.

P-32 MK 11 SINS Theory.

P-33 MK 111 SINS Theory.

P-34 Navigation Aids.

P-35 Basic Inertial Navigation Principles.

P-36 BQN Familiarization.

P-37 Loran C Maintenance.

All Courses designated N- .....

T-6 Fire Control System MK 112 MODO Familiarization.

T-7 Fire Control System MK 112 MODO2 Maintenance.

T-8 Fire Control System MK 113 MODO2 Maintenance.

T-9 Angle Solver, MK18, MODS 0-3, Maintenance.

COURSES AT ADVANCED UNDERSEAS WEAPONS SCHOOL, KEY WEST, FLA.:

T 16 Torpedo Mark 16.

T 37 Torpedo Mark 37-0, 37-1.

T 45 Torpedo Mark 4S.

TW 102 Torpedo Warhead MK 102.

OM 16/14 Torpedo Mark 16/14.

OM 37/27 Torpedo Mark 37/27.

OM 45 Torpedo Mark 45.

Subroc Course (Operational or Maintenance).

COURSES AT FLEET SONAR SCHOOL, KEY WEST, FLA.:

Course 553 Submarine Sonar Officers Course.

Course 557 Submarine Sonar Officers Course (BQQ2 and BQS-4).

Course 563Q Submarine BQQ-2 Operators Course.

Course 570S Advanced Submarine Sonarman.

Course 570SA Submarine Sonar Subjective Analysis.

Course 570SB Submarine Integrated Sonar System AN/BQQ-2 Maintenance.

BQG-4 Sonar Course.

BQQ-3 Sonar Course.

COURSES AT NUCLEAR WEAPONS TRAINING CENTER, NORFOLK, VA., AND SAN DIEGO, CALIF.:

Course 903 Weapons Employment.

Course 946 Submarine Nuclear Weapons Warhead Section.

Course 947 Astor MK 102 Torpedo Warhead.

COURSES AT FLEET ANTI-SUBMARINE WARFARE SCHOOL, SAN DIEGO, CALIF.:

C-570 Advanced Sonarman.

C-596 Submarine Sonar Subjective Analysis.

C-586 MK 16-6 Torpedo.

C-S85 MK 37-0 Torpedo.

C-595 MK 45-0 Torpedo.

C-5S3 Submarine Sonar Officers Course.

Subroc Course (Operational or Maintenance).

BQG-4 Sonar Course.

BQQ-3 Sonar Course.

NAVAL SCHOOLS AT MARE ISLAND NAVAL SHIPYARD AND COMMANDER SUBMARINE GROUP, SAN FRANCISCO:

Class C/TSEC/KW-37-R.

Class C TSEC/KL-47 AN/SGA-3 Repair.

O-9—Subroc and Astor.

COURSES AT FLEET SUBMARINE TRAINING FACILITY SUBMARINE BASE, PEARL HARBOR:

C-20 Loran C WPN-4 Familiarization.

C-21 Loran C WPN-4 Operation.

C-22 Loran C WPN-4 Maintenance.

AN/BPQ2 Missile Guidance Radar.

Regulus Class C Schools.

SSM/Officer Regulus.

COURSES AT SERVICE SCHOOLS COMMAND, NAVAL STATION, SAN DIEGO, CALIF.:

Nuclear Operator Welding Course.

Stainless Steel Welding (Maintenance of qualification-requalification).

COURSES AT SERVICE SCHOOLS COMMAND, NAVAL TRAINING CENTER, GREAT LAKES, ILL.:

FT "C" School UW FCS 101.

MK 18 Angle Solver.

MK 19 Gyro School.

NAVAL SCHOOLS AT NORFOLK NAVAL SHIPYARD:

Class C TSEC/KW-37-R.

Class C TSEC/KL-47 AN/SGA-3 Repair.

Navymen Going Out on 20 To Receive Assistance In That New Career

If you're approaching retirement or transfer to the Fleet Reserve, chances are you, like most Navymen headed for civilian life, are making plans for a second career. You can now get a push in the right direction before you're piped over the side.

Under the new Civilian Employment Assistance Program, counseling on the subject of labor market conditions is available 12 to 18 months before you retire or transfer to the Fleet Reserve. The program, benefits of which were made available to all near-retirement Navymen and women effective 1 Apr 1964, is designed to start you on the road toward a second career.

The new program supplements the counseling you should receive regarding the various retirement, veterans', dependents', and survivor benefits.

BuPers Inst. 1740.4 makes it clear that job development and placement service, as such, is neither possible nor desirable within the military, but that a procedure has been established whereby the career Navyman may be provided counseling concerning the civilian labor market conditions.

The Bureau of Employment Security, through the U. S. Employment Service affiliated state employment agencies, is prepared to see that you get it.

The program is presented in two phases:

- *Phase I* involves a briefing session, conducted by the U.S. Employment Service, 12 to 18 months before retirement or transfer to the Fleet Reserve.
- *Phase II* is a direct employment assistance program which generally commences three months after the initial briefing or orientation session. This phase involves one or more working sessions at a military installation or local employment service office. Your participation is strictly voluntary.

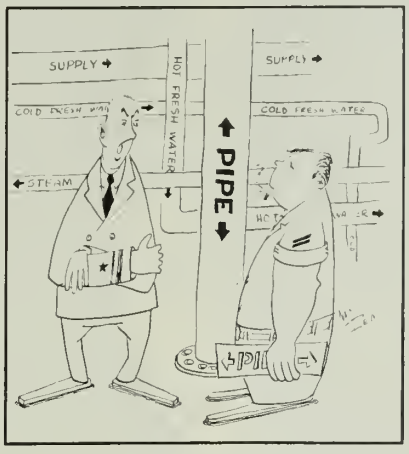
At the discretion of your command, Phase I may include presentations by representatives of such organizations as the Veterans Administration, various veterans groups, and representatives of state, municipal and federal civil service systems, as well as Employment Service spokesmen.

Phase II of the program cannot be administered in areas where the U. S. Employment Service does not maintain a regional office. Therefore, men serving overseas who want direct employment assistance should contact the appropriate commandant upon return to the U. S. If you can't make arrangements for Phase II assistance before you're piped over the side you should contact the U. S. Employment Service Office nearest your home of selection.

If you're on sea duty, attendance at a regularly scheduled briefing ashore in the U. S. is encouraged whenever possible. If your ship's operating schedule makes this impossible, special arrangements should be made (through the appropriate commandant) to accommodate you for both Phase I and Phase II.

Since there are no U. S. Employment Service offices outside the U.S. and Puerto Rico, a program similar to Phase I may be conducted by force and type commanders through the use of special materials.

All-Navy Cartoon Contest
ENS Nat B. Read, USNR



"Let's try to be a little more specific, Rhoads!"

Change in Travel Regs Means Less Risk for You on PCS

After you receive your permanent change of station orders, you can send your family on ahead without worry. If your orders are later canceled or changed the government will foot the bill for the extra travel —even though your transfer never became effective.

This is providing, of course, you are otherwise eligible for dependent's travel at Navy expense.

In the past you could move your family before your detachment, but you ran the risk of having to pay the costs yourself if your orders were altered. In some cases this could happen even after you had checked out.

Here's how it works today:

Say you are stationed in Galveston, Texas, and receive orders to Washington, D. C. You want to send your family and household goods immediately. Go right ahead.

If your orders are changed to read San Diego after your family has started off in the opposite direction you're not automatically bankrupt. The government will pay the current travel rate for the extra distance covered by your family, and it will reship the household goods to San Diego.

The new rules may be found in change 136 to the *Joint Travel Regulations*, which also includes a number of administrative changes.

A New Look at Leadership Basis of Revised Manual

A new book on leadership, *The U. S. Naval Manual for Leadership Support* (NavPers 15934A) has been distributed to naval units for internal distribution. It replaces *The U. S. Naval Leadership Manual* (NavPers 15934).

Topics contained in the old leadership manual are also in the new. These are: "Leadership, Why and How;" "Balanced Efforts in Command Leadership;" "Five Steps Toward Effective Naval Leadership;" "Checklists for Personal Leadership;" "Passing the Word;" Standard Discussion Outlines;" "How to Use Leadership Training Films" and "The U. S. Code of Conduct."

The sections which were carried over into the new book have been extensively revised and updated. In addition, new bibliographies of publications, films and posters reflect the modern emphasis on general military training subjects as well as the references on leadership management and personnel administration.

Discussion outlines have been updated and new outlines on such subjects as counterinsurgency and communist entrapment have been added.

The Story Of A Naval Complex

ALL HANDS SPECIAL SUPPLEMENT

Newport, R. I., like Norfolk, Va., is a huge center of naval activity on the East Coast. Some time back, ALL HANDS *published a special report on the Norfolk complex (April, 1961). Now here's one on Newport.*

The commander of the huge naval base in Rhode Island felt that, not only the rest of the Navy, but the country as a whole would take a deep interest in its operations. As a result, he has compiled a "report to stockholders" which gives the citizens of Newport, the Navy, and the nation, as taxpayers, a good look at one of their important investments.

THE NAVY'S ASSOCIATION with Narragansett Bay, on which Newport, R. I., is located, goes back to before the days when the nation was yet struggling to be born. At one time, England seriously considered establishing a navy yard at Newport. In 1764, Robert Melville reported: "The whole bay is an excellent man-of-war harbour . . . affording good anchorage, sheltered in every direction and capacious enough for the whole of his Majesty's navy . . ."

It was just as well that Britain did not build its navy yard there. During the Revolutionary War, Admiral Lord Howe used the Bay for some time. When it was learned, however, that a French fleet was approaching, British General Clinton ordered Rhode Island and Narrangansett Bay to be evacuated.

The British, by leaving the bay open to the French, were denied future use of the area and were forced to use New York as their base. It is considered by some that the French occupation of Narragansett Bay ultimately led to the British defeat at Yorktown and the end of the war.

From its infancy during the Revolutionary War to

BUSY BASE—Newport is a vast naval complex, here ships are in port at DD pier and *(rt.)* Quonset Point.





its present-day buildup, the U. S. Navy has been a part of the Narrangansett scene. A native Rhode Islander, Ezek Hopkins, as the first Commander-in-Chief of the Continental Navy, used the Bay as a haven for his small fleet between combat engagements. In later years, after the Revolution was over, U. S. men-of-war were common sights in the upper and lower Bay.

DURING THE CIVIL WAR, the Navy again was prominently visible in Newport. As a measure to avoid capture by the Confederates, the U. S. government transferred the faculty and student body of the U. S. Naval Academy from Annapolis to Newport. The Academy operated there for about four years. By this time the Navy had begun to acquire a degree of permanence in the area.

It was in 1869, however, that the pattern of the Navy's development in Newport began to take shape. In that year, the Secretary of the Navy authorized the establishment of an experimental torpedo station on Goat Island. (The station developed torpedoes and experimented on other forms of naval ordnance. In World War II that same torpedo station manufactured 80 per cent of all the torpedoes used by our country during that war).

Then in 1881 the Navy purchased Coasters Harbor Island, on which it established the Navy's first recruit training station. Previously, a sailor learned most of his trade on the job. The establishment of the Recruit Training Station was a milestone in the development of a system by which recruits received extensive training and orientation before being assigned to ships.

In World War I the 92-acre area of the island, and its facilities, proved inadequate as thousands of recruits trooped to Newport. Nearby Coddington Point was bought to accommodate the overflow. After the war, the Recruit Training Station was cut down to its original size. During the Second World War, Coddington Point was again put to use as part of the Training Station. In 1952, when recruit training was transferred to Bainbridge, the RTS was closed down completely.

Coasters Harbor Island is also the site of the famous Naval War College. Established in 1884, this school continues to provide postgraduate level instruction to naval officers. Officers of friendly countries also come here to attend special courses.



TENDERS—DD pier No. 2 is seen between stern of *USS Yosemite* (AD 19) and the bow of *USS Cascade* (AD 16).

JUST BEFORE the turn of the century, a coaling station was established at Melville. Many of our first steam-powered battleships and cruisers anchored between Prudence Island and Melville, while coal barges shuttled between ships and the coaling station.

In 1909, the Navy acquired the site of the present Naval Hospital. Construction was finished in 1913.

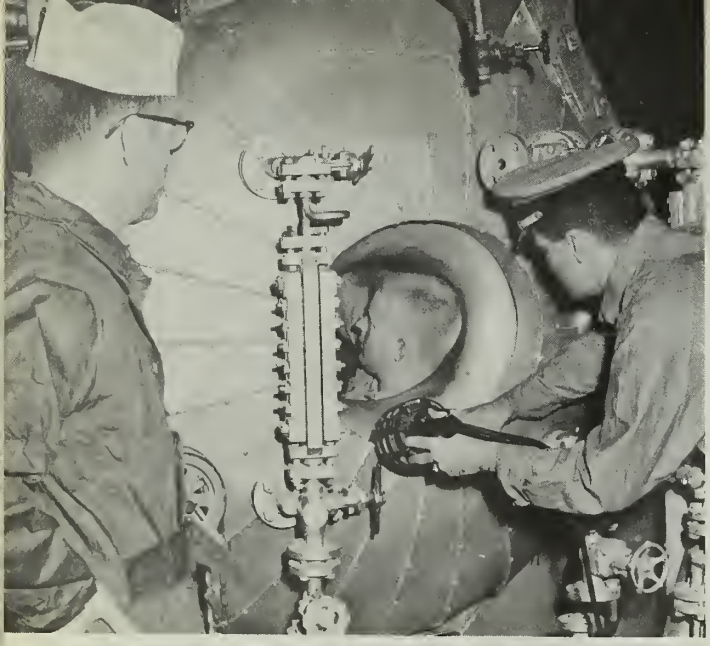
After World War I there was another cutback in military strength. However, in 1940, after World War II had already begun in Europe, Congress appropriated $20 million for construction of the Naval Air Station at Quonset Point. In 1942, the Advanced Base Depot was established at Davisville, the predecessor of the present Construction Battalion Center.

A Supply Station followed at Coddington Cove; fuel facilities, a net depot and a PT boat training center were established at Melville; and a harbor defense unit and communication station were built on Jamestown Island. At Anchorage, construction of Navy housing was begun. Within three years Newport became one

COASTERS HARBOR Island and the Naval War College have been familiar Navy landmarks for many years.







DESTROYER SCHOOL students inspect boiler steam drum. A total of 514 Navymen attended classes in 1963.

of the Navy's busiest and largest installations.

After the war, many of the temporary units on the Bay began to deactivate. In 1946, the entire naval complex in the Bay area was consolidated under a single military command, designated as the U. S. Naval Base. As it now stands, the Naval Base consists of 14 component commands on both sides of Narragansett Bay over which the Naval Base commander has military control.

On the east side are: Fleet Training Group, Naval Hospital, Naval Justice School, Marine Barracks, Naval Officer Candidate School, Naval Schools Command, Public Works Center, Naval Station, Naval Supply Depot, Navy Finance Office, Naval Communication Station, and the Naval Underwater Ordnance Station, which includes the Degaussing Station and the Underwater Weapons Systems Engineering Center.

On the west side are the Naval Air Station at Quonset Point, and the Naval Construction Battalion Center, Davisville.

Modernization has been the trend. New housing, on and off base, has been constructed to improve living accommodations. More units are soon to be built. In the past five years, permanent barracks and bachelor officers quarters have been built to replace World War II structures. A new dormitory for the Officer Candidate School is scheduled for completion this year. Huge warehouses and transit sheds have expanded the capability of the Naval Supply Depot.

NAVAL BASE, NEWPORT

The presence of naval activities in the Narragansett Bay area, considered in terms of employment only, is significant. One part alone of the Naval Base component command—the Overhaul and Repair department of the Naval Air Station at Quonset Point—is the largest single employer in the state, with a civilian work force of 2504 in 1963.

One of the most productive roles of the Naval Base in the over-all mission of the U. S. Navy is in the area of training and schools. Six commands on the base are primarily engaged in providing technical, professional, orientation, and postgraduate training for both officer and enlisted personnel.

The total numbers of students who went through these schools in 1963 were:

Fleet Training Center	27,799
Naval Justice School	1,496
Officer Candidate School	3,930
Schools Command	3,226
Destroyer School	514
Naval War College	346
TOTAL	37,311

Dependents are a major part of the local scene. As members of local communities, military families contribute considerably to those communities through purchasing power, school assistance, help in fund raising campaigns, taxes, etc. Although the Navy provides certain minimum facilities to assist its dependents, a vast amount of the Navy payroll and allotments reaches the local market. The Federal Government also helps to contribute to local school aid by outright grants for each dependent student attending local schools.

Here is a rundown of the various activities you'll find in the Newport naval complex.

COMPONENT COMMANDS

Naval Air Station, Quonset Point: First placed in operation in 1941, NAS Quonset Point is one of the best known commands in the area. The air station provides maintenance and logistic support facilities for numerous aircraft squadrons, and two aircraft carriers are homeported there. Its planes range as far as the Antarctic.

Although not primarily a supply center, it maintains great quantities of stock and inventory to carry out its mission. In 1963, the average inventory amounted to $239,000,000 for a total of 191,000 items. There was an average monthly demand for 47,000 items, valued at $19,000,000.

During the year, construction for the installation of an extensive electronic data processing system was completed. For more on this activity, see page 61.

Naval Communication Station, Newport: One of 20 communications stations in the Navy, the Naval Communication Station, Newport, is in constant operation 24 hours a day, every day of the year.

It occupies Building No. 87 (and part of No. 87A) on famed Coasters Harbor Island. It is responsible for broadcasting messages to Fleet units at sea, for receiving communications from them, and for delivering and distributing messages throughout Fleet and shore activities. These functions are made possible through the operation of a communication center, a cryptographic center, a classified relay center serving the New England area, and a radio transmitter and receiving station. The station also performs security functions.

Construction Battalion Center, Davisville: The nation's first advanced base depot for the support of construction battalions was established at Davisville in 1941. Later redesignated as Construction Battalion Center, it is one of three such installations in the country, the others being located at Port Hueneme, Calif., and Gulfport, Miss. Throughout most of its history, CBC has been associated with the training and assembly of personnel and material for advanced bases. CBC also maintains a capability of moving vast amounts of war reserve material in a short time for use by the Seabees.

Home-based facilities are provided at Davisville for the Construction Training Unit; Commander Naval Construction Battalion, U. S. Atlantic Fleet; five Mobile Construction Battalions (MCBs One, Four, Six, Seven and Eight); Commander, Antarctic Support Activities; Detachment Two, Naval Support Forces, Antarctica; Commander, Radar Picket Squadron Two; USS *YR-65* and eight radar picket ships; USS *Nitro* (AE 23); the floating drydock USS *ARD 16*; and the Rhode Island National Guard.

One of the major roles of CBC since 1954 has been to support Operation Deep Freeze explorations in Antarctica. Seabees engaged in this operation are trained, equipped and deployed from Davisville. They have constructed seven Antarctic bases, one of them directly atop the South Pole. In 1963, four ships were outloaded from Davisville with scientific and other equipment headed for Antarctica.

Fleet Training Group: FTG Newport consists of the Fleet Training Center and the Underway Training Unit.

The Underway Training Unit assists in the inspection of ships.

The Fleet Training Center provides operational training where such training cannot be done on board ships. Personnel are trained in the various aspects of shipboard operations and functions through classroom instruction, practical demonstration and the use of synthetic training devices.

FTC provides precommissioning training to the crews of all destroyer-type ships commissioned on the east coast of the United States. Precommissioning personnel cause a considerable fluctuation in the Center's population, ranging from 500 to 2000 men in any given period. In 1963, the crews of six guided missile destroyers and two destroyer escorts received precommissioning training under FTC cognizance. In addition, 215 foreign students attended regular courses.

Naval Hospital: The Naval Hospital, located in the vicinity of Constellation Basin, opposite the southern tip of Coasters Harbor Island, is a regional hospital for all military elements in the Narragansett Bay area. It provides general clinical and hospitalization services for the naval shore activities, units of the Fleet, Army and Air Force personnel, dependents of members of the armed forces, and other authorized persons.

A 375-bed hospital, it provides all primary professional hospital services, such as medical service (including pediatrics, neuropsychiatry, dermatology and pharmacy); surgical service; orthopedic service; eye, ear, nose and throat service (including a lens-grinding laboratory); and laboratory, nursing, radiology, outpatient, obstetrics-gynecology and dental services.

In 1963 some additional tasks were assigned to the Naval Hospital. Among them were the responsibility for providing a refresher training program for hospital corpsmen attached to the Antarctic Support Group, and for providing instructors and assistance in the training of medical department officers under indoctrination at the Naval Schools Command.



HERE'S HOW—Recruits were taught how to load and unload a ship at Newport, so the old photo's caption states.

Naval Justice School: The Naval Justice School is the Navy's only law school and is devoted to the training of officers of the Navy, Marine Corps and Coast Guard in the Uniform Code of Military Justice and the procedures of the armed forces disciplinary system; and to the training of enlisted personnel of all the armed forces in the clerical aspects of the disciplinary system, including the closed microphone court reporting system. It is the only school of its kind in the Armed Forces.

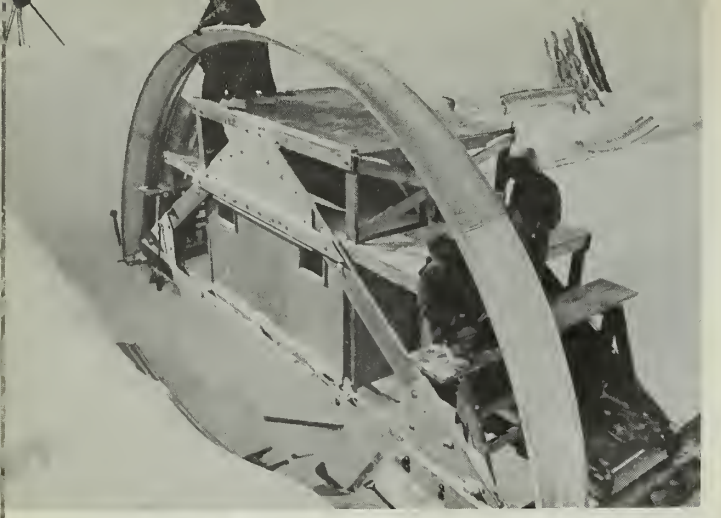
Staffed with officers who are licensed to practice law in the various states, instruction is given on a professional level. Graduates who later attend civilian law schools are generally given credit toward a law degree for their Justice School instruction.

The outgrowth of instruction commencing in 1942 at Port Hueneme, the Justice School was commissioned in 1947 and moved to Newport in 1950. The school has continually offered a variety of courses to meet the needs of the Fleet. The regular seven-week course for junior officers, offered a minimum of six times a year in Newport and once at Camp Pendleton, Calif., provides the Fleet with young officers trained to handle the various types of disciplinary matters normally encountered by Fleet units. Students come from ships and air squadrons of both the Atlantic and Pacific Fleets. Some are sent to the school after graduation from the Officer Candidate School in Newport.

The Justice School also offers a special short course

NOT SO DIFFERENT—Recruits stand formation at 'B' barracks of Training Station, Newport, R. I., in early 1900s.





SEABEE CENTER at Davisville is responsible for support of Operation Deep Freeze in the far off Antarctic.

for commanding officers, executive officers and other senior officers. In August of each year the Justice School convenes a Reserve Officers' Seminar, usually attended by approximately 150 officers.

Marine Barracks: The Marine Barracks is located above the destroyer piers in the Coddington Cove section of the Naval Base. The Newport Marines provide perimeter security for the Naval Base and internal security for the Naval War College and the Naval Communication Station. The Marine Barracks provides administrative, exchange, supply, maintenance support and messing facilities for its personnel.

As a continuing project, the Marine Barracks has adopted the Children's Home of Newport, and Marine personnel have spent many off-duty hours assisting in civic projects.

Officer Candidate School: The mission of this activity is to train and indoctrinate officer candidates. Formerly a part of the Naval Schools Command, it became a separate command in December 1960.

Students are primarily college graduates who are candidates for Naval Reserve commissions in the line, Supply Corps, Civil Engineer Corps, or one of the special duty designators (e. g., law specialist, special duty engineering, public information, intelligence). A limited number of enlisted personnel from the Fleet who are candidates for regular Navy commissions also attend the four-month academic and military course.

During each summer an eight-week course is convened for Reserve Officer Candidates (ROC); college students attend two eight-week periods during their summer vacations and receive their commissions after graduation from college.

A third department in OCS, the Officer Indoctrination Department, is devoted to the indoctrination of newly commissioned officers who are mostly Limited Duty Officers and Medical Service Corps officers procured from enlisted status. In addition, probationary ensigns in the Dental Corps and medical officers report to this department prior to their first tour of active duty.

Since it opened in 1951 to meet the emergency needs of the naval service during the Korean conflict, the Naval Officer Candidate School has become the Navy's primary source of junior Naval Reserve officers. In 1963, a total of 3074 officer candidates completed training at OCS. Additionally, 857 other officers were trained by the Officer Indoctrination Department.

Naval Schools Command: This command administers and coordinates the Chaplain Indoctrination School, the Communication School, the Supply School, and the Women Officer School.

At the *Chaplain Indoctrination School,* courses of instruction are given to newly commissioned clergymen who are entering the service as chaplains. In 1963, a total of 144 chaplains graduated from this school.

The fundamental purpose of the *Communication School* is to provide basic communications training and instruction to officers in order to prepare them for such duties as communications officers, communications watch officers, signal officers, radio officers, and custodians of registered publications. A total of 977 officers were graduated from this school in 1963.

The *Women Officer School* trains, through 16 weeks of instruction, women college graduates seeking to become naval officers of the line and, in an eight-week course, trains nurses and Medical Service Corps women officers. Emphasis in these two training programs is placed on administrative procedures, the naval establishment, customs and traditions of the Navy, and personnel administration. In 1963, 91 women line and supply officers and 270 nurses were graduated.

The *Supply School* trains petty officers and non-rated men for disbursing, storekeeper, commissaryman and steward ratings. Qualified enlisted personnel may attend any of the five courses offered at this school, ranging from basic to advanced work. The average course here is 12 weeks in length. In 1963, students from eight foreign countries attended courses at this school. A total of 1647 students graduated during the year.

Public Works Center: The Public Works Center provides facilities maintenance, transportation support and utilities services to all activities on the Newport Naval Base complex. The management bureau, the Bureau of Yards and Docks, supports all common-use functions (such as roads and waterfronts); provides professional engineering service; provides inspection service for public works and public utilities; maintains housing; and finances the Naval Base taxi and bus service.

Naval Station: The Naval Station provides logistic support for the operating forces of the Navy, and for dependent activities and other commands.

One of the major functions of the Naval Station concerns the health, welfare and morale of Fleet and shore-based personnel and their dependents. In 1963, the Naval Station fed an average of 1400 enlisted men and women per meal; it had 4968 civilian visitors (for example, Boy Scout and church groups), spent $400,000 from the composite recreation funds, conducted more than 400 divine services and acted as host to five district, regional and All-Navy athletic tournaments. It cared for 38,030 dental patients.

The Station also provides facilities for, and renders limited support to, such agencies as the American Red Cross, the Navy Relief Society, and Nursery Schools.

Supplementing the above, the Station provides such facilities as officers' and enlisted men's clubs, clothing and small stores services, commissary store, and a Navy exchange consisting of barber shops, retail stores, cafeterias, snack bars, tailor shops, automobile service stations, cobbler shop, portrait studio, uniform and acces-

sory shop, motor repair shop, dry-cleaning plant, laundry plant, newspaper delivery service, automatic vending machines, hobby shops, a swimming pool, bowling alleys and a theater. The Naval Station Band appears frequently at parades and other civic functions throughout the area. The Base newspaper, The Newport *Navalog*, is published weekly. The Naval Station chaplains provide a full religious program. Provision is made for personnel of faiths other than those of the assigned chaplains.

The Naval Station also exercises internal and external security control for all activities of the Newport complex. It provides fire protection from six fire stations; manages brig facilities for all confinees from all activities of the Narragansett Bay area, Fleet units present and the New London Submarine Base; provides shore patrol support; conducts reports of offenses under the Uniform Code of Military Justice; acts as liaison between naval and civilian police and provides legal assistance in connection with the work of the shore patrol.

The Naval Station also provides piermaster services to ships in the area. It has control of Navy harbor tugs, pilot assignments and other Navy service craft, and delivers fuel oil to Fleet units. In 1963, 6040 tug commitments were fulfilled, and 47,219,390 gallons of fuel oil were delivered to ships operating in the area.

The Station assigns public quarters to military personnel and maintains a Dependents Information Center where general assistance and local housing information is available.

The Station's Military Personnel Department provides personnel accounting services and maintains personnel records for enlisted and officer personnel of the Naval Station and other Newport activities. During the year it processed a monthly average of 219 transients, 58 separatees, 178 students for the Fleet Training Center, and 1062 other personnel.

Naval Supply Depot: The Supply Depot in Newport is under the military command of the Naval Base Commander and the management control of the Bureau of Supplies and Accounts.

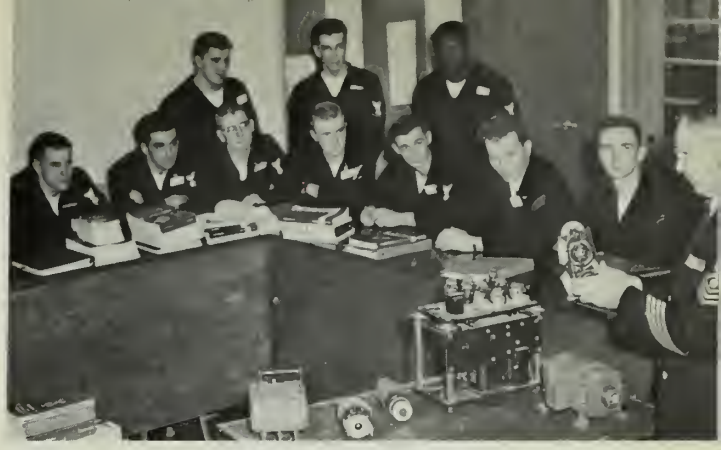
It provides supply and fiscal service to Fleet and shore activities of the Department of Defense located throughout New England.

It is one of the three largest Navy supply activities on the Atlantic Coast. Its plant, valued at $24,000,000, is spread over 845 acres. Covered storage area totals 654,000 square feet, including a modern cold storage plant. Fuel storage capacity is the third largest in the entire Navy, totaling 2,750,000 barrels.

All types of materials except aviation items are stocked. The inventory consists of 117,000 items valued at $24,000,000. During 1963, 695,098 issues were made, with a total value of $39,871,469. Its purchasing department handled more than 35,000 purchase actions during the year. The fuel department issued 7,280,266 barrels of fuel oil.

In March 1963, NSD was the first Navy activity to have in operation a Uniform Automatic Data Processing System for stock points. As a pilot installation, NSD functioned the past year as a training point for personnel of other activities scheduled to convert to the UADPS.

During the year, a site was prepared for the installation of an Automatic Digital Network Terminal, which is scheduled to be operational sometime this year. It will be part of a world-wide network that will provide automatic switching systems for teletype and data communications among overseas installations and between the United States and those installations.



SCHOOL HOUSE—Since Newport started to take shape in 1869 it has contributed greatly to training of Navymen.

Underwater Ordnance Station: The Underwater Ordnance Station is a research and development laboratory under the direction of the Bureau of Naval Weapons. The station is located on the eastern shore of Narragansett Bay, overlooking the destroyer piers in the Coddington Cove section of the Naval Base.

The primary mission of NUOS is the research and development, test and evaluation of underwater weapons systems. It performs engineering analyses, functional and environmental tests, ranging and operational evaluation of torpedoes, and stores and issues ammunition and explosives.

Its physical plant includes the environmental test laboratory, wind tunnel, acoustic tank laboratory, fire control systems laboratory, launching devices test laboratory, shops facility, and the torpedo testing range. Its deep propulsion test facility is the only known laboratory of its kind in existence. Proximity to the destroyer force in Newport and the submarine force in New London facilitates the development of weapons systems.

More than 200 professional personnel at the station are engaged in such fields as oceanography, electronics, electrical, chemical, acoustical, and mechanical engineering.

Another component in the station's growing list of laboratories was added in 1963 with the dedication of the Fire Control Laboratory. The equipment used here will facilitate the testing of fire control systems and components by simulating shipboard conditions.

Underwater Weapons Systems Engineering Center: Formerly the Central Torpedo Office, this activity underwent an expansion of mission in 1963 and, at the same time, acquired its new name. NAVUWSEC serves as a technical and coordinating agency of the Bureau of Naval Weapons for underwater missiles programs.

Although its original mission was in the field of torpedoes only, NAVUWSEC now provides engineering and technical assistance to the Bureau of Naval Weapons in the coordination of procurement and maintenance of underwater weapons systems. The center assists Fleet units in the maintenance of these systems.

In providing this type of assistance to Fleet units, NATO allies and contractors engaged in the manufac-



SUPER SERVICE—Piermart at the Naval Supply Depot saves man-hours with supermarket-like shopping set-up.

ture of underwater missiles, the center's personnel had to do a lot of traveling. They logged over 800 separate trips in a 12-month period.

Degaussing Station: The Degaussing Station, located on Gould Island in Narragansett Bay, is the smallest command on the Naval Base. Its mission is primarily to reduce or neutralize the magnetic properties of steel-hulled ships as a countermeasure to magnetic mines. This mission involves the calibration of ships' degaussing systems to their maximum efficiency.

In 1963 the Degaussing Station ranged 118 ships, provided three new ships with initial degaussing calibration (two of the ships were minesweepers that were turned over to Pakistan and Korea under the Military Assistance Program), inspected the degaussing system, of 38 ships, and provided numerous tugs and small boats with compass adjustments. Technical assistance was also provided to Boston Naval Shipyard; the Military Sea Transportation Service, New York; and the Submarine Base, New London, Conn.

This station also serves as a test facility for underwater equipment designed and developed by the Naval Ordnance Laboratory, Silver Spring, Md. In 1963, this command ranged 226 submarines as part of special tests conducted at the Degaussing Facility, Submarine Base, New London.

Navy Finance Office: One of the smallest commands of the Naval Base is the Navy Finance Office, located on Coasters Harbor Island. It maintains military pay records and makes payments for all officers and enlisted men, including Reserves, attached to all activities on the east side of Narragansett Bay. It also performs similar service to small craft which do not have supply officers, and designated Fleet units berthed in the area.

As a central disbursing authority at the Naval Base, NFO acts as a depository for all incoming monies, and handles payment vouchers ranging from military travel pay to civilian beneficial suggestion awards. It provides logistic support to Fleet units by transferring funds to disbursing officers afloat and rendering professional assistance and the use of the facilities of NFO to disbursing officers afloat in the Newport area.

It issues transportation requests for the travel of military and civilian personnel and their dependents, and provides disbursing functions in connection with men discharged by the Separation Center at the NS.

Housing: The Navy maintains a total of 1352 housing units in the Newport area for occupancy by armed forces families. Comparing the military population with that number, it becomes readily apparent that the Navy's ability to provide housing is tremendously exceeded by the demand. Consequently, occupancy of private rental units is almost constantly complete. In 1963, the number of families renting such units averaged 3150. In addition, some 870 families owned their own houses.

Civic Affairs: Some of the greatest contributions to the local community by military personnel are not in economic, but rather in civic affairs. More than half the Boy Scout troops in Newport County, for example, are largely composed of military dependents and military personnel. In Parent-Teacher Associations, local service clubs, Little League baseball, athletics of all kinds, dramatic groups, and in church organizations, Navy personnel actively show their interest in their communities.

In addition, the Naval Base supports numerous programs of entertainment and assistance to local communities. Hundreds of thousands of dollars' worth of equipment is donated to local health, education and welfare activities each year. Almost 7000 visitors—both adult and children—were conducted on guided tours of Base commands on both sides of the Bay and on board Cruiser-Destroyer Force ships during 1963. Facilities such as gymnasiums, meeting halls, swimming pools, and camping areas were also made available to local organizations during the year. A Speakers Bureau provided Navy speakers to service, church and social groups.

ASSOCIATED COMMANDS

Headquarters, Construction Battalions, U.S. Atlantic Fleet: The Atlantic Seabee construction battalions are commissioned units of the naval operating force. In wartime, they provide military and construction support to Navy, Marine and other forces in military operations and build and maintain naval base facilities. In peacetime, they are normally assigned construction projects contributing to training and readiness to meet emergency situations.

COMCBLANT is responsible for the employment and deployment of these battalions. Each Mobile Construction Battalion (MCB) spends seven to nine months on overseas deployment and three to four months in Davisville.

A new component of the Atlantic Construction Battalions is the Seabee Technical Assistance Team (STAT). Ten of these STATs are maintained in the Atlantic Fleet. The mission of each STAT is to provide technical assistance in both socio-economic and military construction areas. Each STAT is a construction team placed under the direction of the Military Assistance Program or the Agency for International Development. Each is capable of planning and design assistance, on-the-job or classroom construction training, field inspection, field supervision, or assistance in setting up preventive maintenance programs. As a basic feature, each team member can speak a foreign language peculiar to his team.

To date, one STAT has been deployed to the Dominican Republic, another to Ecuador, and a third to

Chile to assist in areas damaged by earthquake.

In 1963, MCB One completed a deployment to Rota, Spain, and undertook another to Guantanamo Bay, Cuba. MCB Four deployed to Argentia, Newfoundland, and its Detachment LIMA completed a pier rehabilitation project at Port-au-Prince, Haiti. MCB Seven returned to Davisville from Guantanamo Bay, and then deployed to Puerto Rico and other points in the Caribbean. MCB Eight completed an Antarctic deployment, and began preparations at Davisville for a second such tour.

Headquarters, Cruiser-Destroyer Force, U.S. Atlantic Fleet: One of the largest single entities in New England, in terms of economic importance, is the Cruiser-Destroyer Force, which maintains its headquarters aboard the Newport-based destroyer tender USS *Yosemite* (AD 19). The Cruiser-Destroyer Force consists of 58,000 men, operating nearly 200 ships in the Atlantic, Caribbean and Mediterranean. There are 56 of these ships based in Newport.

Units of CRUDESLANT are called upon to escort convoys, conduct antisubmarine warfare operations, support aircraft carriers and provide gunfire support. Many of these ships are equipped with *Terrier*, *Tartar* and *Talos* surface-to-air-missiles, antisubmarine rockets, drone helicopters, advanced sonar and radar capabilities, and modern rapid fire gunnery installations.

During 1963, three new ships of the force were commissioned: USS *H. E. Yarnell* (DLG 17) at Boston Naval Shipyard, *Tattnall* (DDG 19) at Charleston, S. C., and *Joseph Strauss* (DDG 16) at Philadelphia. All are guided missile frigates. The keel was laid for a fourth, *Truxtun* (DLGN 35), in June.

The fourth annual goodwill cruise to Africa, SoLant Amity IV, got underway in February. The three ships which made the cruise visited more than 10 countries on the African continent, spreading good will through donations and assistance in civic projects, as well as participation in athletics and other public affairs. The ships that participated were the Newport-based destroyer escorts USS *Joseph K. Taussig* (DE 1030) and *Van Voorhis* (DE 1028) and the Norfolk-based dock landing ship *Spiegel Grove* (LSD 32).

In August, three Newport-based ships participated in Operation Unitas IV. This annual cruise entailed participation with units of eight South American navies in combined antisubmarine warfare exercises. The cruise also helped to familiarize U. S. Navymen with those regions of growing strategic importance. The three Newport-based ships, which returned in December, were USS *Courtney* (DE 1021), *Hammerberg* (DE 1015), and *Cromwell* (DE 1014).

The radar picket destroyer USS *Hissem* (DER 400) departed her Newport homeport in August to participate in the current Operation Deep Freeze.

Naval Destroyer School: The Destroyer School is located in Building 138 on Coasters Harbor Island. It was established on 1 Jul 1961 and provides the destroyer force with professionally qualified officers and enlisted personnel.

The officers' course at the Destroyer School is a 26-week course. The Enlisted Maintenance Course is a four-week course for second and third class petty officers. In addition to the normal courses given during the year, specialized instruction and indoctrination were given to prospective CRUDESLANT commanding officers and unit commanders, pre-commissioning crews, foreign officers, and students attending the Officer Candidate School, Chaplains School, and Wave and Nurse indoctrination.

Fleet Air Quonset: As a part of the Naval Air Force, U. S. Atlantic Fleet, the headquarters of the Commander Fleet Air Quonset is responsible for the support and combat readiness of Fleet Aviation units based in the northeastern seaboard area. The commander has several other duties in addition to his Fleet Air responsibilities. These include: Commander Naval Air Bases, First ND; and Commander Quonset Antisubmarine Warfare Group. The headquarters for this command is located at NAS, Quonset Point.

In his primary mission, Commander Fleet Air Quonset exercises administrative and operational command of all carrier-type aircraft squadrons based in the Quonset complex. In 1963, his responsibilities were expanded to include the administrative, material and operational readiness inspection of the Atlantic Fleet's five antisubmarine aircraft carriers.

Commander Quonset Antisubmarine Warfare (ASW) Group is responsible for assisting with antisubmarine warfare programs in adjacent Atlantic waters spanning the coastline from southern New Jersey to the Canadian border. He works with Canadian forces to the north and other U. S. forces to the south in implementing his ASW programs.

Commander Naval Air Bases, First ND, is responsible for the maintenance of military control over all naval air bases in the New England states.

Based at Quonset Point are three carrier antisubma-

OLD TIMERS—Photo taken in early 1900s of Station at Newport shows *Constellation*, *Boxer* and ferryboat *Inca* in port.



rine air groups equipped with specialized antisubmarine aircraft such as the *Tracker* series, which are the fixed-wing, twin-engine mainstays of Navy carrier-type ASW aviation, and antisubmarine helicopters which provide additional search and attack capabilities for the Fleet. There are also two special mission squadrons: Carrier Airborne Early Warning Squadron 33 (VAW-33), which deploys detachments of all-weather aircraft to several aircraft carriers, and Air Development Squadron Six (VX-6), which provides airlift and flies special airborne research missions in conjunction with U. S. South Polar scientific investigations.

Three antisubmarine aircraft carriers are homeported in the Quonset area: USS *Essex* (CVS 9) and *Lake Champlain* (CVS 39), berthed at Quonset Point; and *Wasp* (CVS 18) at Boston.

Atlantic Fleet Mobile Photographic Group, Newport Detachment: This is a unit of the Naval Air Force, U. S. Atlantic Fleet. Its job is to provide still and motion picture coverage of all items of Naval interest in the New England area, as well as photo-triangulation services. It maintains camera teams for immediate deployment when required.

This unit replaced the Atlantic Fleet Photo-Triangulation Group, Newport Detachment, on 1 Jul 1962. It provides only photo coverage and does not provide any processing service.

The most important project undertaken by this command in 1963 was the photographic coverage of the search operation for the submarine USS *Thresher* (SSN 593). Ninety-five other projects were completed during the year and over sixty thousand feet of motion picture footage were shot. Its personnel were deployed on such projects as the SoLant Amity cruise to Africa and the Unitas cruise to South America.

Naval Reserve Training Center: Located in the Coddington Point section, the Naval Reserve Training Center supports all Newport Naval Reserve units.

A harbor entrance control post, located at Beavertail Point, and a portion of Fort Wetherill, on Jameston Island, are maintained by the center and used as operational facilities for training of Reserve personnel.

The center's training facilities are also made available to the Navy League Sea Cadet Corps, and approximately 80 Sea Cadets meet weekly at the center.

Naval War College Finally we come to the world famous Naval War College. Dedicated to the study and advancement of the science of naval warfare, the War College has had a succession of eminent naval leaders as presidents since its establishment in 1884.

The War College staff and student body include officers of the Navy, Marine Corps, Coast Guard, Army and Air Force, as well as civilian members of other U. S. government agencies, and foreign naval officers from 30 Free World countries.

The college is organized into seven major departments: Academic Plans, Administration, Extension Education, War Gaming, and resident courses in Naval Warfare, Command and Staff, and Naval Command, each headed by a senior Navy captain.

The mission of the War College is to further an understanding of the fundamentals of warfare, international relations and interservice operations, in order to prepare officers for higher command. Three regular one-year courses are conducted: the Naval Warfare Course, the Command and Staff Course and the Naval Command Course for senior Free World naval officers.

Officers selected and ordered to the course in Naval Warfare (the senior course at the College) are captains and commanders of the Navy, officers of other military services in equivalent ranks and certain civilians of comparable seniority from the State Department and other government agencies. An average of 160 students attend this course annually.

The Command and Staff Course, the junior course for mid-career officers, is conducted for senior lieutenant commanders and junior commanders, and officers of other services in equivalent rank. Enrollment in this course is usually 160.

Officers nominated and ordered to the Naval Command Course are outstanding captains and senior commanders of foreign navies whose countries have been extended an invitation to send representatives. This course prepares them for higher command responsibility in their own navies and familiarizes them with U. S. Navy methods, practices and doctrines.

The War College system of teaching is a controlled process of self-education. The faculty-student relationship is one of equals studying a common problem. The staff advises the students and observes results with a view to constant up-dating and improvement of the curriculum.

With the years, and as a result of its association with many now famous military men and other prominent persons, the college has become something of a museum, housing many valuable items of historical interest.

Other associated activities in Newport are:

- U. S. Navy Sub-Board of Inspection & Survey.
- Marine Corps Reserve Training Center.
- Consolidated Surplus Sales Office.
- USS *Luiseno* (ATF 156), Fleet Tug.
- USS *Nipmuc* (ATF 157), Fleet Tug.
- Mobile Support Unit Eight.
- Mobile Technical Unit Eight.

And this is Newport. Even the Navyman who has been stationed there will be surprised to learn how many naval activities are actually located in this vast complex which is dedicated to support of the Fleet and preparation of thousands of Navymen in sea duties which will take them all over the world. Newport can be justly proud of its role as a great naval center.

NEWPORT KNOWLEDGE—Six commands are primarily engaged in training for officer and enlisted personnel.



DECORATIONS & CITATIONS



"For exceptionolly meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ ELLER, DONALD T., RADM, USN, for services as Deputy Chief of Staff, Logistics and Administration, Allied Forces Southern Europe from 17 Sep 1961 to 15 Apr 1964. Confronted with a myriad of challenging, complicated and extraordinary problems, both operational and administrative, evolving from the tactical and support requirements of the joint six-nation force which comprises the Southern Region of the North Atlantic Treaty Organization, RADM Eller, through his outstanding professional competence, perseverance and diplomacy, successfully overcame all major obstacles to insure for Allied Forces Southern Europe the most productive logistical and administrative resources and systems obtainable to support the operational commitmcnts of the command.

Gold Star in Lieu of Second Award

★ DUERFELDT, CLIFFORD H., RADM, USN, for service from September 1961 to May 1964 as Commander Fleet Air Hawaii and Commander Barrier Force Pacific. As Fleet Air Commander under the Commander Naval Air Force, U. S. Pacific Fleet, RADM Duerfeldt conducted numerous operational readiness inspections of Pacific Fleet attack aircraft carriers, and was instrumental in the maintenance of a high state of combat capability of aviation units deployed to the U. S. Seventh Fleet. As Barrier Force Commander under the Commander in Chief, U. S. Pacific Fleet, he developed and directed many advanced procedures and techniques for the detection of enemy penetration.



"For heroic conduct not involving actual conflict with an enemy . . ."

★ ARBOGAST, DONALD L., DC2, USN, for heroic conduct on 19 Dec 1960 while serving on board USS *Remey* (DD 688). As a member of *Remey's* rescue and assistance detail, which was sent to aid in fighting the fire on board USS *Constellation* (CVA 64) at Pier J, New York Naval Shipyard, Brooklyn, N. Y., Arbogast unhesitatingly descended to the second deck in the after section of the burning ship and carried an injured man to safety. After this rescue, he removed a second injured man from an area above the hangar deck in the face of intense heat and heavy smoke. He then assisted in removing several other casualties from this area.

★ CASTLE, JAMES E., AC2, USN, for heroic conduct on 29 Dec. 1963 while serving with the Shore Patrol, NAS, Downtown Division, Jacksonville, Fla. When a disastrous fire engulfed a hotel in Jacksonville during the early morning hours, Castle, a shore patrolman residing in the hotel, immediately evacuated the building and assisted firemen in unrolling fire hoses and in donning oxygen masks. He then re-entered the blazing structure and made numerous trips through the smoke-filled hallways, assisting people to the nearest exits. Obtaining a master key in order to check rooms in an attempt to find casualties unable to make their way to safety, Castle found one guest overcome by smoke and administered mouth-to-mouth resuscitation for a period of approximately 30 minutes until relieved by firemen.

★ CUMMINGS, JOSEPH D., LT, USN, for heroic conduct on 20 Dec 1963 while serving with Commander Fleet Activities, Ryukyus, as Officer in Charge of Port Services, Okinawa. Upon being informed that a sailor, apparently deranged and armed with a loaded pistol, had menaced a group of other Navymen and had threatened to kill if necessary, LT Cummings immediately went to the scene of the incident where he found several men backed against the outside of the Port Services office in fear of their lives. Although unarmed, he walked boldly toward the seaman and, in the face of death threats, a pointed pistol, and an attempted discharge of the weapon by the sailor, succeeded in disarming the man, thereby preventing possible serious injury or death to those who witnessed this event.

★ MANN, DOUGLASS L., JR., LTJG, USN, for heroic conduct on the late morning of 5 Feb. 1964 while serving at the U. S. Naval Amphibious School, Coronado, San Diego, Calif. Volunteering to assist in the rescue of two men who were trapped under an overturned LCVP in the surf at Yellow Beach, LTJG Mann executed four dives under the perilously shifting boat and succeeded in freeing both men and assisting them to safety. His professional skill, courage, and persevering efforts in the face of great personal risk were in keeping with the highest traditions of the U. S. Naval Service.

★ ROSS, EARL A., AC2, USN, for heroic conduct on 29 Dec 1963 while serving with the Shore Patrol, NAS, Downtown Division, Jacksonville, Fla. When a disastrous fire engulfed a hotel in Jacksonville during the early morning hours, Ross, an off-duty shore patrolman residing in the hotel, immediately evacuated the building and assisted firemen in unrolling fire hoses and in donning oxygen masks. He then re-entered the blazing structure and made numerous trips through the smoke-filled hallways, assisting people to the nearest exits. Obtaining a master key, he checked many of the rooms in an attempt to find other victims unable to make their way to safety.

★ SAMPSON, FRANK, JR., CT1 USN, for heroic conduct on 4 Dec 1963 while serving on board the U. S. Naval Radio Station (R) Northwest, Chesapeake, Va. Responding to a fire alarm to assist in fighting a fire in an apartment adjacent to his own, Sampson, upon learning that a two-year-old boy was still in a back bedroom upstairs, gained access to the rear porch roof through another apartment and made several attempts, along with two other men, to enter the bedroom window, but was driven back repeatedly by the billowing smoke and extreme heat. Aware that time was running out, Sampson finally lunged, head first, through the window, crawled to the baby's crib, and succeeded in removing the child to safety.

★ ZAMBO, MICHAEL S., ADAA, USN, posthumously, for heroic conduct on the afternoon of 5 Oct 1963 while swimming with two companions at Jacksonville Beach, Fla. Caught in a treacherous undertow which abruptly swept him and his two companions out into deep water. Zambo, after a long and exhausting struggle against the current and surf, managed to reach the safety of shallow water. Observing that his friends were still struggling to reach the shore, he plunged back into the surf in a valiant attempt to assist them, despite his own exhausted condition.

TAFFRAIL TALK

Most official reports of troop movements—due to form and military custom—tend to be cryptic, colorless, and devoid of all but factual details. Occasionally, however, even military prose cannot camouflage the drama behind the deed.

Such a report was recently received by the Bureau of Yards and Docks, and forwarded on to ALL HANDS.

Untitled and only five pages long, the report chronicled a 500-mile overland trek by Navy Seabees with a mile-long convoy through the rain forest of Thailand.

It began at 0500 some months back when LT G. E. Fowler, CEC, USN, and 38 Seabees of Detachment WHISKEY (alphabetical, not liquid) of Mobile Construction Battalion Three moved out from Nakhon Phanom, headed southwest for the city of Bangkok.

The Seabees had put finishing touches on an airfield at Nakhon Phanom, just across the Mekong River from Thakhek. Now the Seabees and their equipment were wending their way back home.

Through forests sheltering elephants, tigers and snakes, the Seabees' route wound westward a third of the way across Thailand. At Udon Thani, the road turned south and traversed the flat rice bowl of South Asia to Bangkok.

Composed of more than 100 pieces of equipment, including giant wheeled pans, excavating shovels, drag lines, dump trucks, tool trucks, bulldozers and enormous earth-moving machines, it was an hour after the first piece of equipment left camp before the last piece could begin to roll.

Diesel engines roaring in the jungle stillness, the serpentine convoy clanked and groaned forward, sometimes only a few miles at a time before maintenance of the machines and rest for the men became imperative.

The distance from Nakhon Phanom to Bangkok is 510 miles, and lengthy stretches of what passed for roads were simply swallowed up in the surrounding jungle.

Rivers, too, presented problems. A weak timber bridge near Phon forced the convoy to turn aside and ford a 45-foot wide stream about four feet deep. Its unexpectedly soft bottom failed to support a D-8 bulldozer on two tries, requiring the Seabees to winch it, and other heavy equipment, across the river.

Outside Sakhorn Nakhorn, a ponderous scraper being towed by a dump truck suddenly lurched to a stop. The truck didn't. Result: The rear frame of the truck was ripped off. Four hours after the welders went to work the convoy moved on.

Machinery staggered into ditches, bogged down in soft spots, and huge rubber tires disintegrated. At one point on the trek (a 20-mile stretch between Ban Pai and Phon) the entire distance had to be graded before the machines could move.

Extricating their equipment from a gigantic sandtrap (seven miles long), building bridges where necessary, and battling steep grades, the men pushed on. Six days later, met by a police escort from Bangkok at midnight, the convoy bellowed through the streets, awakening the entire city. The next day was spent in a well earned rest.

LT Fowler's report might well have earned the subtitle "WHISKEY, on The Rocks."

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D. C. 20370.

• **AT RIGHT:** BIRTHDAY TIME —Left to Rt. from top: (1) Waves chat with their chief, CAPT V. B. Sanders. (2) F. E. Davis, YNC, paints ta hame on old German map of U. S. (3) Cake-cutting celebrated a recent birthday. (4) Honar women at Bainbridge NTC pose for phato. (5) Waves man pay line at San Diego NTC. (6) Wave drill team looks sharp in whites. The ladies in blue are currently celebrating the 22nd anniversary af the Waves.






HAPPY







WORLD TRAVELERS



NAVYMEN GO WHERE THE FOUR WINDS BLOW

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

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SEP 16 1964
SOCIAL SCIENCES



in this issue

PLANNED MAINTENANCE and SHIP OVERHAUL

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AUGUST 1964



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

AUGUST 1964 | Nav-Pers-O | NUMBER 571

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• **FRONT COVER:** HIGH HAT—ENS Mel C. Howell, USN, lines up Navy hats of past and present that illustrate his Navy life—less than eight years from boot camp in Nov 1955 through advancement to chief and entrance into Officer Candidate School, from which he graduated as ensign.

• **AT LEFT:** NIGHT LIGHTS—Attack aircraft carrier USS Midway (CVA 41) seems all aglow while under the powerful lights of Drydock No. 4 at the San Francisco Naval Shipyard where she received repairs last year.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.

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Our First Nuclear Task

THE MEDITERRANEAN SEA, which has seen nearly every type of naval vessel the world has had to offer, had the first look at the United States' first nuclear task force recently.

The atomic task force was formed when USS *Bainbridge* (DLGN 25) and *Long Beach* (CGN 9) joined the carrier *Enterprise* (CVAN 65) in the Mediterranean.

When *Long Beach* was delivered to the Navy in September 1961, she became the first nuclear-powered surface ship to be armed with a main battery of guided missiles. She was, in fact, the first nuclear-powered surface fighting ship in the world.

Bainbridge, which was completed in September 1962 was the first nuclear-powered destroyer type warship ever built. She carries antisubmarine weapons and conventional armament besides her two batteries of guided missiles.

The 85,000-ton *Enterprise* is the world's largest aircraft carrier and the only nuclear-powered vessel among the Navy's 15 attack carriers.

The only other nuclear-powered surface vessel which has been authorized is *Truxtun* (DLGN 35), another guided missile destroyer. *Truxtun* is scheduled for launching late this year.



THIS MONTH the nuclear task force USS *Enterprise, Long Beach* and *Bainbridge* will leave the Med and steam down the west coast of Africa on the first leg of an around-the-world voyage. They will not resupply or refuel during the cruise.

Because *Enterprise* is too large to pass through the Suez and Panama canals, the force will make the trip the long way, via the Cape of Good Hope and Cape Horn.

The date the three ships are due to arrive back in the United States is classified, as is the ships' route.

The nuclear ships that make up the task force left the U. S. some months ago. The message announcing the around-the-world trip reached them in mid-June.

The men on board greeted the news warmly, although the orders will keep them away from their home ports longer than was originally planned. The three ships carry a combined crew of about 6000 men.

When the Great White Fleet sailed around the world in 1907-09, it took 14 months. This cruise will take a fraction of that time.

The Vice Chief of Naval Operations described the purpose of the



Force



voyage in the following statement: "While we have had experience in steaming nuclear submarines around the world, we have not had comparable experience with nuclear surface task groups. We hope to gain experience in operating on a long voyage, steaming as a self-contained nuclear task group, free from logistic support.

"Since the Navy is so frequently called to utilize its mobility in remote areas of the world, we want to improve this capability to the maximum. We want to increase our potential for staying where we go. To do this, we need continuous training and continuing experience on improving our staying power at sea. We also hope to familiarize U. S. naval personnel with infrequently visited ocean areas."

Clockwise from Upper Left: (1) Nuclear task force composed of the guided missile cruiser USS *Long Beach* (CGN 9), attack aircraft carrier USS *Enterprise* (CVAN 65) and guided missile frigate USS *Bainbridge* (DLGN 25) will make a world cruise. (2) Atom-powered *Bainbridge* takes a turn at sea. (3) *Enterprise* will leave a wide wake while on cruise. (4) *Long Beach* was world's first nuclear-powered surface warship. They're ready to go.





Planned Maintenance

A REVOLUTION may be occurring aboard your ship. Few major ideologies are involved, but the consequences may reach further than a mere change of labels. We are referring to a change in approach in attempts to solve age-old problems.

Ship maintenance is the case in point. Over the decades, as steam replaced sail, and as nuclear power replaced steam, ships became more and more efficient and more and more complicated.

Common sense and experience alone were no longer sufficient to keep them operating. The Navy found it necessary to supplement these attributes with schools, bureau manuals and manufacturers' guides.

By-products of this technological advance were a steadily growing mountain of paper work and a complicated—often confusing—maze of instructions.

In essence, the revolution now underway is a war against these by-products. Its purpose is to strip away all but the essential maintenance instructions; eleminate all but the essential records.

This is a most welcome revolution. It goes under the name of the "Navy Maintenance Management System."

BECAUSE of its importance to you and your ship, the Navy feels you should know how it works and what it means.

Under the old ship maintenance system an engineering officer, for example, could expect to cope with numerous instructions on how to maintain the equipment in his department. He would find maintenance requirements set forth not only in *Bureau of Ships Technical Manual*, in the various manufacturers' instruction books and drawings, but also in the type commander's instructions and certain other documents.

All this printed matter attempted to tell him what to do, how to do it, and what records to keep. It was possible that one publication would be at odds with another on how to do a specific job and, to add to the confusion, the bookkeeping was monumental.

It was small wonder that men with maintenance responsibilities may have felt like the Duke of Wellington, who blasted his superiors in London with the comment that he couldn't submit the official reports they required if they wanted a victory.

Although Wellington's methods of reducing paperwork have not been invoked by the Navy, it was evident that something had to be done to correct the maintenance situation. Eventually, *Fleet Work Study Groups* were called upon to find out what was wrong and what could be done about it.

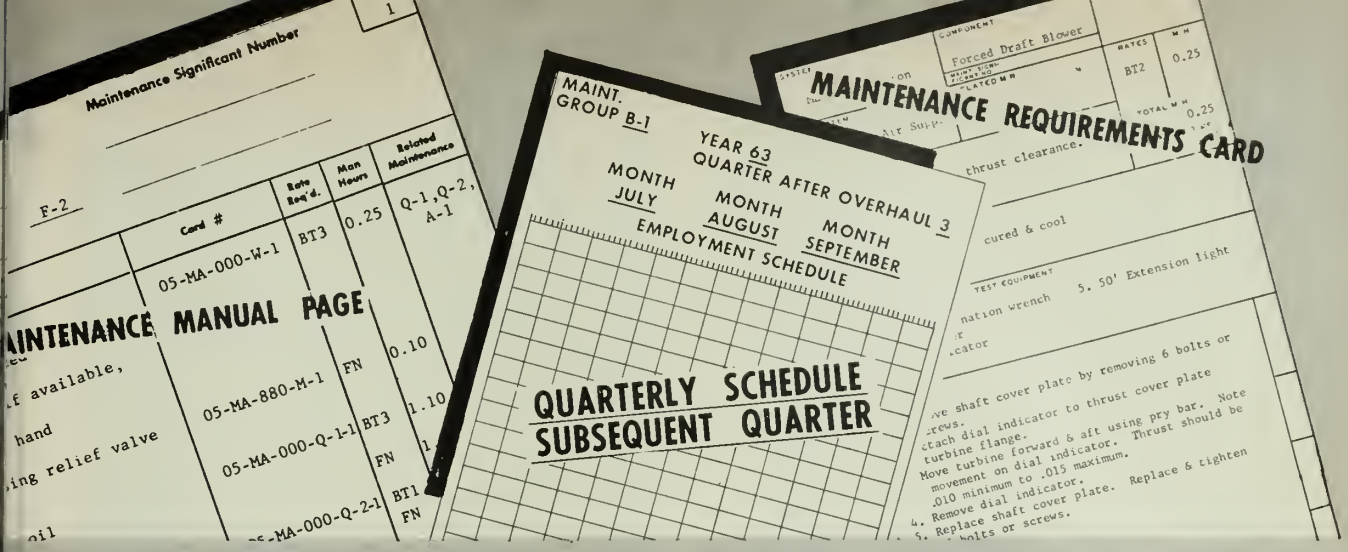
THE WORK STUDY Groups began their research in destroyers. They found the maintenance work lacking in several respects:

- Maintenance wasn't uniform from one ship to another, or from one man to his successor in the job. As a result, machinery was either over-maintained, under-maintained or improperly maintained.
- Too much paperwork was required. Maintenance people were becoming bogged down in a deluge of daily, weekly, monthly, quarterly and annual reports and forms.

Sometimes men were left with insufficient time to perform the very tasks the paperwork was to record.

- Not only were shipboard departments flooded with paper work, but the recipients were hard put to cope with the incoming data.
- Because there was a lack of real maintenance management at the command level, maintenance frequently became a personal preference or guesswork.
- Maintenance manuals frequently offered conflicting advice. This invariably gave rise to the question of which document took precedence.
- There was often a lack of proper tools, materials and parts to do a good job.

ARMED WITH a knowledge of the shortcomings of maintenance procedures as they existed, the Work Study Groups began to cast about for remedies.



Here's How It Works

Questions were asked—What should be done? Why? When, where and how should it be done and who should do it?

Nothing was considered to be sacred in the search for a new approach to an old problem.

The Work Study Groups have come up with the first planned maintenance program that is uniform throughout the Fleet and is applicable to all shipboard maintenance.

One of the biggest improvements accomplished by the new system is a vast reduction in the amount of reading material concerning maintenance procedures.

Under the new system, there are the *Planned Maintenance System Manual,* the *Cycle Schedule* and the *Quarterly Schedule* (mounted together in a maintenance control board). These documents are principally used by the captain and his department heads.

Weekly Schedules and *Maintenance Requirement Cards* are the principal documents required at the working level.

The manual and schedules are the essence of simplicity. Let's examine them to see how they work.

THE BASIC DATA used by the department head is the *Planned Maintenance System Manual.* In this manual, every component of his department is listed with a description of the least amount of maintenance required to keep it operating satisfactorily.

This manual eliminated the necessity of consulting the numerous overlapping maintenance publications.

By compressing only pertinent information into one easy-to-handle manual, the Fleet Work Study Groups gave the department heads an effective tool by which maintenance could be regulated and standardized at the flip of a page.

In the manual, the department head finds a page for each component or piece of equipment in his department. By consulting this page he can see at a glance what is needed to maintain each component; the frequency with which the steps must be taken; the rate of the man who can do the work, the safety precautions involved and an indication of how long the job should take.

HERE IS WHERE the *Cycle Schedule* makes its entrance into the picture.

The *Planned Maintenance System Manual* is the fountainhead from which information is taken for the schedules used by the department heads and the men who work on the machinery.

The Cycle Schedule, for instance, shows which maintenance measures must be taken for each quarter after a ship's overhaul. All the machine's maintenance requirements (except daily and weekly) are noted on this schedule, and all the jobs shown can be done by the men on board with the tools and materials available in the ship.

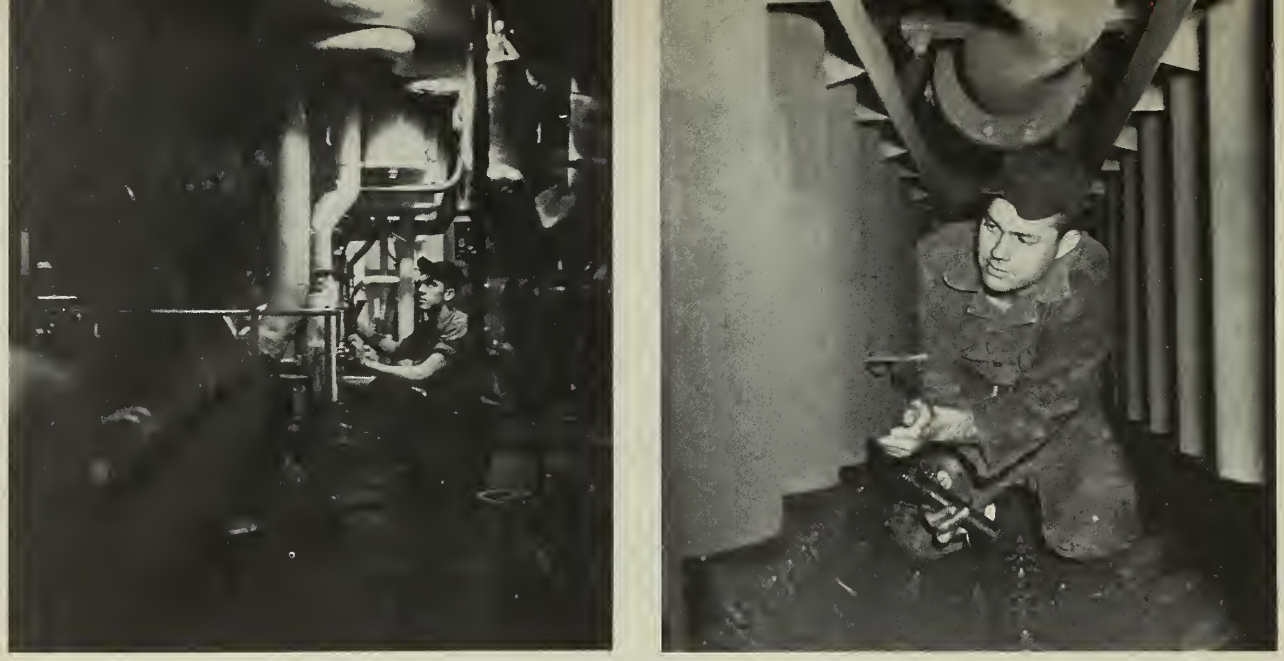
Long range scheduling of maintenance is accomplished by means of the *Quarterly Schedule.* Two of them (one for the current quarter and the other for next quarter), posted alongside the Cycle Schedule, make it easy to do long range planning, for maintenance requirements can be transcribed from the Cycle Schedule to the Quarterly Schedule and made to jibe with the ship's employment schedule.

This lessens the possibility that maintenance will be scheduled when the ship is at sea when perhaps the machinery scheduled for maintenance can't be dismantled.

When the work is done, it is crossed off the schedule. If the work isn't done, the job is circled and rescheduled.

THE WEEKLY SCHEDULE is the piece of paper that really gets down to business. It assigns a specific individual to perform maintenance tasks required on a specific date.

The components to be maintained are listed, and the day on which maintenance is to be performed is written opposite the name of the man to do the job.



ON THE JOB—New planned maintenance system has simplified the work necessary to keep ships in top shape.

The Weekly Schedule requires no more bookkeeping than the others. If the work is done, it is simply crossed off the schedule. If it has to be rescheduled, the Chief circles the notation and later reschedules it. The Chief can see at a glance what has or has not been done.

When a man sees his name on the Weekly Schedule, it will be opposite the component he is expected to maintain. The Weekly Schedule will also show him what maintenance is required and the number of the *Maintenance Requirement Card* which he consults on how to do the job.

The card is pocket-sized and lists the job the man is to do; tells him how long the job should take; what tools he will need; the parts and material which are required to perform the maintenance task, as well as detailed procedures to follow and safety precautions he should take.

A complete set of cards is kept in a container installed in each maintenance group working area near the weekly schedule where the men can get at them.

There is, of course, a master deck kept in the department office. If a card is lost, soiled or torn, it can easily be replaced by typing a duplicate from the master deck.

TO DEVELOP and evaluate the Maintenance Requirement Cards a prototype ship is selected and its equipment is inventoried.

Inevitably, some of the equipment found in one prototype will also be found in others. If cards have already been made for identical equipment in another prototype, they are used in the set which is being created or updated.

If no card has been made for a piece of equipment, one is created along with a page for the *Planned Maintenance System Manual.*

All this is done by people specially trained for their job. Frequently, they are recently retired chiefs working for industrial contractors. Where complex pieces of equipment are involved, such as are found in electronics systems, the cards are developed by technical specialists.

When a preliminary deck of cards is assembled for a prototype ship, it is sent to the Bureau of Ships to be technically reviewed and approved for installation.

In the first review, the Bureau looks for obvious errors in procedures or omissions in safety precautions.

The real test comes when the Fleet Work Study Group and the Type Commander receive the cards for installation in the prototype ship.

The deck of cards and the manual pages are evaluated by the ship, the Fleet Work Study Group and the type commander. At the same time, Cycle Schedules are written.

When the Fleet Work Study Group and the type commander have finished their installation, their recommendations and comments are sent to the Bureau of Ships for review. The Ship's force also evaluate the cards and manual pages and forward their comments to the Bureau of Ships. At this time, a final detailed technical review is undertaken by BuShips.

BuShips tells the type commander when the deck has been approved. Only then are the approved deck of Maintenance Requirement Cards and copies of the *Planned Maintenance System Manual* available for installation in the rest of the ships of this class.

ONE OF THE advantages of the new system is easy visibility given to the ship's maintenance status.

Every component in the *Planned Maintenance System Manual* is readily visible at the flip of a page. There are no references to look up, no place else you need go—It's all there.

When the Cycle Schedule is prepared, it is easy to transcribe needed information from it to the Quarterly Schedule. No more effort is required for the Weekly Schedules.

A cross through the job shown on any schedule indicates the work has been done. If the job is circled, that means it must be rescheduled.

When a department head or a chief sees cross-marks on his schedule, he knows he has a look-alive crew. An excessive number of circles indicates something is wrong somewhere and there is need for corrective action.

Some circles, of course, are unavoidable. They are of comparatively small consequence, however, if the work is rescheduled and done in the immediate future.

ALL THE SCHEDULES ARE open for inspection on a Maintenance Control Board, which can be posted anywhere, but is usually located outside the department office. All the schedules are flexible enough to accommodate employment changes as they occur. The Cycle and Quarterly Schedules combined will give the over-all planned or preventive maintenance program for the ship. The board containing these schedules is known as the Maintenance Control Board.

But what of maintenance records? The schedules themselves are the only records required. The captain of the ship has only to look at the quarterly schedules of the various departments on board for an accurate index of his ship's readiness.

If he sees the maintenance which has been scheduled is crossed out, he knows his ship is prepared. If he sees extensive rescheduling of maintenance, something is wrong—particularly if, after rescheduling, the maintenance still remains undone.

The department heads and the petty officers in charge can see at a glance what is being done and who is doing it.

The man with the wrench is spared the frustration of, among other things, beginning a job only to find he doesn't have the material or the tools he needs.

The Bureau of Ships has an index of the effectiveness of the maintenance which is being performed aboard ship. If there are extensive breakdowns in spite of faithful adherence to maintenance schedules, the Bureau has a basis for asking why—a question which may result in a new contractor being selected to supply the offending components or a redesign of the equipment.

THE PLANNED Maintenance System can only be as effective as the commanding officer of the ship and the men using it want it to be. To date, the system has been very well received.

Although the system can't guarantee that failures won't occur, it can certainly reduce them. It can also furnish the ship's department heads and the captain with a management tool for knowing what must be done; when it must be done and whether or not it has been done.

The system has eliminated many tedious hours of work. For instance, the maintenance formerly required for portable storage batteries has been drastically reduced. The requirements for maintaining battery tray record cards have been eliminated.



KEEPING HER GOING—The planned maintenance manual eliminates consulting numerous sources of information.

Removing turbine thrust and journal bearings for inspection has been changed from a quarterly requirement to an overhaul cycle requirement.

Fireside boiler cleaning, which formerly required at least 18 hours, now takes seven hours. Maintenance of electronic equipment under the Planned Maintenance System takes only a fraction of the time formerly required under POMSEE.

In addition, the new system has reduced reams of publications and reports to a few simple pieces of paper, making the Planned Maintenance System a prime example of the fresh wind that is blowing through the Navy—of taking an entirely fresh approach to a hoary problem and producing a solution which works so well and so simply that one wonders why nobody ever thought of it before.

If a poll were taken on the popularity of the Planned Maintenance System, the system would probably rate high. The problem thus far has not been in selling it but, rather, installing it fast enough to keep up with Fleet requests.

In the Navy, as is true elsewhere, when the demand exceeds the supply, there is usually a good product involved.

—Robert Neil.

IT'S A HIT—Planned Maintenance Program is in big demand by the Fleet making it hard to keep up with the requests.



SHIPSHAPING—*USS Independence* (CVA 62) undergoes overhaul. *(Below)* Changes to superstructure are in progress.



Overhaul

PERIODICALLY, every active Navy ship pulls into the yard for overhaul. While she's sitting under the shipyard cranes, she receives the repairs and modernization which will keep her up to par with Fleet standards.

These overhauls help keep the Fleet modern and ready.

Every regularly scheduled overhaul has two facets: Repair of existing equipment, and modernization. Although the age of a ship plays a large part in the necessity for repairs and modifications, older ships have no monopoly on overhaul periods. From the time a new ship slides down the ways—with a chip in her paint where a champagne bottle was bashed against her bow—she's subject to the damaging effects of wind, weather, normal wear and tear, and obsolescence. Before the combined effects of these things make themselves felt to any great degree, she'll go into a shipyard.

The physical deficiencies of each ship in the Navy are chalked up on three separate lists. BuWeps keeps the list of ordnance modifications. BuShips keeps a tally of scheduled changes in hull, machinery, electrical, electronics, and associated systems. The third list, repairs needed, is kept aboard the ship concerned.





DRY BOTTOM—*USS Lake Champlain* (CVS 39) rests in drydock. *(Left)* Shipyard welder closes hole in carrier's hull.

Wet Slips and Dry Docks

How fast these lists grow depends upon the complexity of a ship, its age, and how fast the concepts of warfare change. These factors govern how often each ship type goes into the shipyard for regular overhaul, how long she will stay, and what will be done.

The three lists are quietly kept up while the ship operates with the Fleet, until about 150 days before a regularly scheduled overhaul. At this time BuWeps forwards a list of ordnance modifications to the ship concerned, the type commander, and the shipyard scheduled to do the work.

This correspondence, called the *150-day letter,* is followed by the *120-day letter* from BuShips. This will list the ship alterations.

The type commander is required to comment annually on the alterations to be done during the next fiscal year, during the review of the tentative FIP (Fleet Improvement Plan).

THE SHIP is required to comment if a planned alteration has already been partially or wholly completed, or is not needed. Any ship can also make a request for an alteration when the need arises.

The 120-day letter concerns changes to be made in the ship, and has nothing to do with what needs fixing. This is the subject of a work-list, which contains repair requests prepared in each department aboard ship and is submitted by the commanding officer, for screening action by the type commander. It is then sent to the naval shipyard or industrial manager.

The ship takes the initiative on repairs. Since commissioning or the last overhaul period, whichever was later, your ship has been keeping a Current Ship's Maintenance Project (CSMP) file. This lists every piece of equipment aboard, plus the repairs it needs.

These needed repairs are transferred from the CSMP to work requests by either the ship's division officers or engineering officer. The requests are then sent to the CO.

The commanding officer screens the requests, assigns each a priority, and forwards them to the type commander.

The type commander's action on the work requests is subject to one rather major limitation—money. Each fiscal year every type commander in the Fleet is allotted a certain amount of money with which he is expected to keep the ships of his command in good repair. Consequently, the amount of money he can allot for repair of each ship depends upon the condition of the ship and how much money is needed elsewhere.

If the type commander does not approve the work request for shipyard accomplishment, he may approve it for accomplishment by a tender or the ship's force—or he may recommend submission of an alteration request or deferment of the request.

ABOUT 75 DAYS before the overhaul is scheduled to begin, the type commander (or his representative) forwards the stack of work requests, now slightly diminished, to the shipyard.

Several weeks before the overhaul begins, it's time for the arrival (or pre-arrival) conference. This is a meeting of the ship's commanding officer, the type commander or his representative, and shipyard officials.

With this meeting out of the way, the shipyard will complete its advance planning. Estimators go over the work requests and determine what material will be needed for each job. The material is ordered and—if everything goes smoothly—the material, from scuttlebutt switches to new radar, will be on the pier or in the warehouses be-

fore the ship pulls into the yard.

While the supply workers are running down parts and material, planners work out methods of tackling each job, write job orders, and send them to the various shipyard shops.

All this advance planning takes place well before the ship is due to arrive, so it's easy to see how little details in the work orders can pay off. It is this advance planning which makes it possible for the shipyard workers to meet your ship and go to work immediately, with little time lost due to confusion. About 85 per cent of all work orders are written and delivered before the ship enters port, and the remainder are usually finished before one-fifth of the overhaul period is completed.

Despite all this planning, however, there are always many problems which call for on-the-spot coordination. Consequently, each ship is assigned a ship superintendent, a naval officer who acts as liaison between the ship and the yard.



A LETDOWN—New mast is lowered into place on the frigate *USS John S. McCain* (DL 3) during overhaul.

ABOUT THIS TIME you'll begin to notice certain changes aboard ship. The supply department will let stores dwindle to make elbow room for repair work. And, since yard periods are often considered to be the most hazardous peacetime period for the ship and crew, safety bulletins will appear often in the plan of the day.

As the time draws closer all easily damaged material, especially that which will not be used until the ship goes to sea again, is protected or removed. Special attention is given to such items as the ship's chronometers.

Shortly before the yard period is scheduled to begin, the ship will get underway for an ammunition pier, where all the ammo will be unloaded—a task which usually calls for an all hands working party. Excess fuel will also be offloaded, to facilitate tank cleaning and repairs.

THE FOLLOWING DAY is the big one. Your ship will get underway, move across the harbor, and tie up at a shipyard pier.

Within minutes helmeted workers storm aboard. They carry hoses, cables, and lines, which they drape across the deck. They check measurements and consult diagrams, and a man with a cutting torch begins burning a hole in a bulkhead.

"What a madhouse," you think. Organization seems to be completely lacking. But remember, each shipyard worker is armed with a work order and is intent on filling all or part of it. Because of the pre-arrival planning (and clear, concise work requests), he can go directly to the right spot and get the work underway.

Work progresses rapidly during the day because, in a shipyard, time is valuable. If you're in the yard for emergency repairs, work may even continue around the clock.

As soon as you pull into the yard, your ship will probably go on cold iron, which means that the boilers will not be working and the ship will receive steam, water and power from the pier. Because the black gang is not required to stand boiler watches, your ship will probably go into four-, five-, or even six-section liberty.

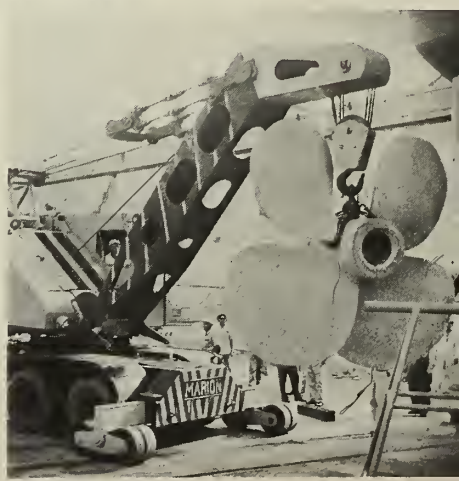
Because the entire crew is not usually needed aboard, a yard period may be the time for leave and schooling. Many of the crew may pack their seabags for leave or for a TAD period at a nearby service school.

FOR THE MEN who stay on board however, there will be little rest or recreation. The ship's company has some important duties to perform while their ship is undergoing overhaul.

One of these will be standing fire watches. Fire hazards, because of the electrical cables strung across the deck and the almost constant welding going on throughout the ship, are at a maximum. During an overhaul period almost every non-rated Navyman does a bit of duty with a fire extinguisher, watching a bulkhead while a shipyard welder

THE SETUP — Large drydock is readied to receive a Navy ship. *(Rt.)* Huge propeller is hoisted onto shaft.





works with his equipment on the other side.

Another chore which may fall to the ship's officers and petty officers is signing off work orders. While the shipyard is working on a job, someone who is familiar with the ship must inspect the work in progress and, when the job is done, must test the equipment, and certify that the work has been completed satisfactorily. Before signing off work orders, equipment is often given rigorous tests—if a piece of machinery is going to fail, it is much better that it fail while the ship is sitting beside a pier in a shipyard than while the vessel is in the channel, or steaming out to sea.

The shipyard workers are not the only ones working on your ship. Many repair jobs, postponed because of operational commitments, are completed by the ship's company while in the yard. There are also the assist-ship's-force jobs.

An assist-ship's-force job is one which, for the most part, can be accomplished by the crew, providing the shipyard lends minor assistance either with tools or skilled workers.

HOUSEKEEPING will become a big job. The work going on tends to add to the normal litter which acmulates aboard ship and cleanliness becomes even more important than while the ship is at sea. Scrap and other waste, if allowed to accumulate while a ship is undergoing overhaul, can become a major safety problem and fire hazard.

Last, but loud, will be the chipping hammers, both automatic and manual. Almost every crewmember who does not own ear plugs will probably get them before the first week in overhaul is completed.



PROPER MAINTENANCE has kept *USS Constitution* shipshape over years since putting to sea back in 1798.

After your ship has been in the yards 10 days to two weeks, it will probably go into drydock—unless she has recently been drydocked for emergency repairs.

Before the ship is drydocked, carpenters and engineers go over the ship's docking plan to determine the setting of keel blocks and the shaping and setting of bilge blocks that will support her while in drydock. These keel and bilge blocks must be properly set on the dock floor and the ship must rest on them in the correct position or her keel may bend and plates rupture.

As soon as the preceding ship has left the drydock and the water has been removed, the keel and bilge blocks are carefully set in their correct position on the floor of the dock for the next customer. Then the drydock must be flooded.

Water is let in slowly at first, so that the position of the blocks will not be changed by rushing water. When the water level is high enough so the blocks and shoring won't be washed out of positon, the flood gates are opened and millions of gallons of water flood into the dock.

WHEN FLOODED, the dock is ready for the ship. Aided by tugs and guided by special pilots, the ship is brought up to the dock entrance and is positioned over the blocks by use of a head capstan, handling line and side capstan. The gates close.

Within four hours the dock is dry.

While in drydock the entire ship below the waterline is sandblasted and repainted. Two types of paint are used. One prevents rust and corrosion and the other prevents fouling by various types of sea life. Sea valves are overhauled, shaft and rudder bearings may be removed and renewed, sonars, fathometers and propellers are repaired.

Often, drydock work may go on around the clock if the dock is needed for other ships.

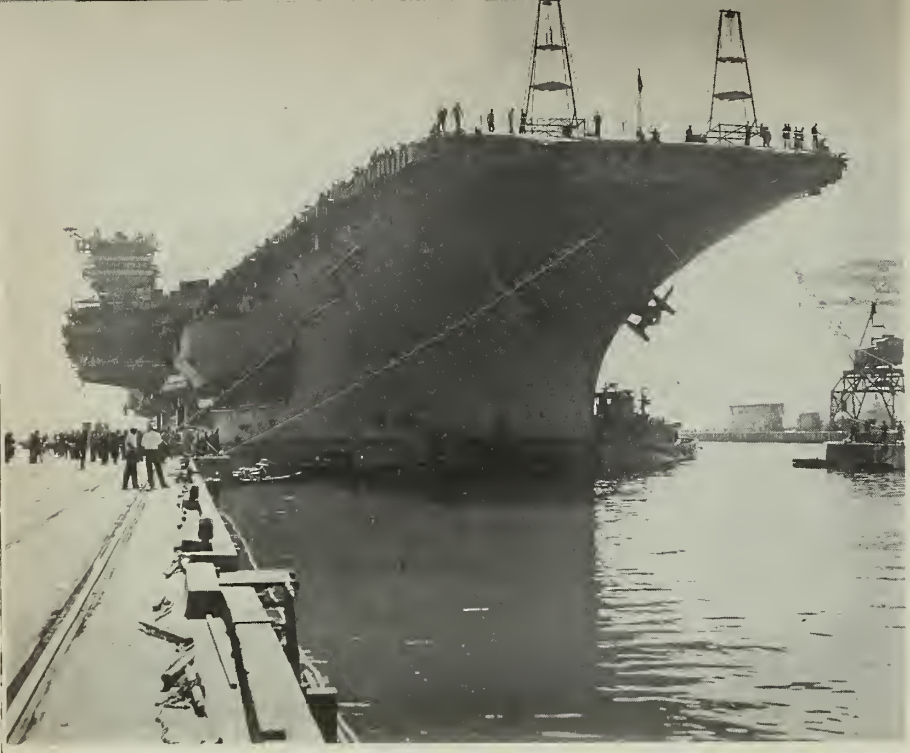
Work on the ship's interior does not stop while a ship is in drydock. While the external work continues, teams of workers may be inside the ship rebuilding boilers, installing new generators, or putting new insulation in the reefers.

WHEN ALL the work below the waterline has been completed the ship is ready for refloating—an extremely critical operation. Should the

SEAMAN ON STAGE chips old paint from ship's side. *(Rt.) USS John S. McCain* (DL 3) rests on blocks in drydock.







TUGGING IN — *USS Ranger* (CVA 61) moves into drydock for overhaul.

ship list or rise too quickly, pressure on the hull plating by bilge or keel blocks might cause hull damage.

Once afloat, the ship is moved back into a wet slip, where work progresses.

During this period the ship's berthing and mess spaces may be out of commission for a time, in which case the crew usually moves into nearby barracks and eats at a mess hall. Sometimes, when the nearest mess hall is too far from the ship to be practical, box lunches are delivered.

As the ship finally enters those last few weeks of her yard period, she begins to look somehwat seaworthy again. Equipment which had been removed for repair is returned and installed. Scaffolding is removed from around her superstructure. Work orders are signed off one after another. The crew moves back on board.

And then it is time for dock trials.

The dock trial is the first of two tests which the entire ship must complete before the overhaul is considered finished. During dock trials the ship remains moored while the screws churn the water. To avoid steaming out to sea with the dock lashed alongside, the commanding officer of a two-screwed ship usually orders one screw forward and one reversed. Ships with only one engine must hold down their RPMs and test their mooring lines often.

THE REALLY RUGGED test of the shipyard's workmanship, however, comes about one week after the dock trial. During sea trials the ship puts to sea with shipyard observers on board and, in an open stretch of water, the OOD kicks her in the tail. The ship turns and zigzags as the steering gear is thoroughly tested. The OOD calls for flank speed and the engine room responds. Every possible piece of repaired gear is tested.

Even if the ship operates perfectly during sea trials, she is still not ready to begin sea operations. First comes the "ready for sea" period, which is time—usually one week—set aside for the crew to become familiar with operating the ship once more, and to restore order and wring out the new installations. Men who checked aboard when the ship was hardly recognizable receive their indoctrination.

Although this period is set aside for the ship, which is considered finished with the overhaul, the ship superintendent may remain on board so that the ship's commanding officer or exec can consult him in case of last-minute snags. Yard workers who come aboard during the ready-for-sea period do so only with the approval of the commanding officer.

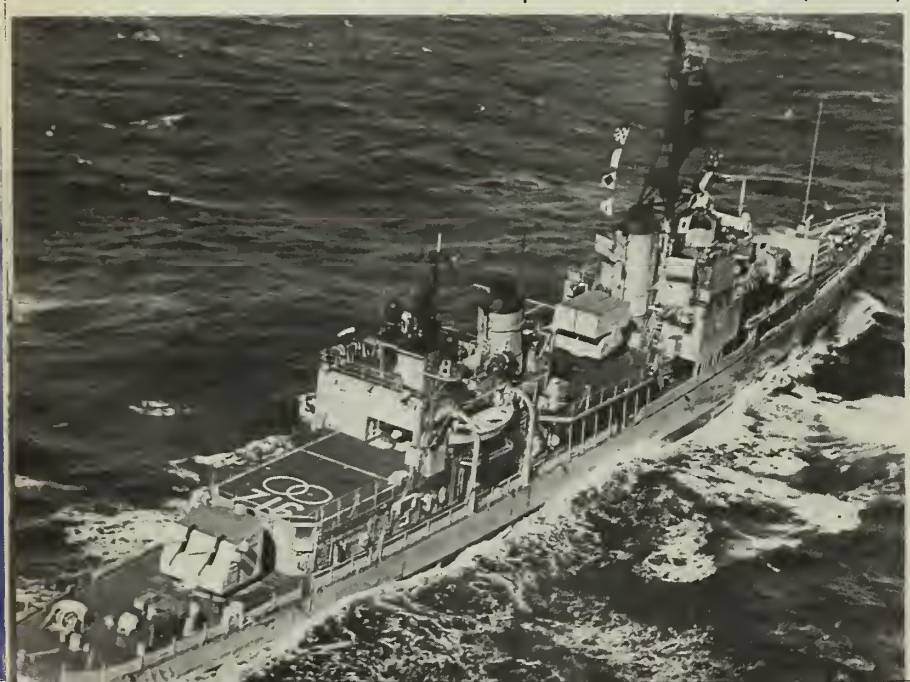
For the next few days you may bump into bulkheads and trip over pad-eyes which were not there before the ship came into the yard. And some of your buddies may come back after a leave period and not recognize their old home.

But chances are good that when she goes out to sea again, and after you've had a chance to get used to those pad-eyes, bulkheads, stanchions and machinery, you'll find they come in very handy indeed.

A few days after you've rejoined the operating fleet, your division officer will begin making entries in the CSMP, and the BuShips engineer will already be hard at work with new modifications for your ship's pilothouse or mess deck. Everyone's ready for your *next* routine overhaul.

—Jon Franklin, JO1, USN

FRAM PROGRAM adds life to older ships such as *USS Wiltsie* (DD 716).



SERVICE PLEASE—Floating drydocks perform an important service keeping ships of the Fleet mobile and ready.

Floating Shipyards

ONE OF THE special pieces of equipment in the massive tool chest of Commander Service Force, U. S. Pacific Fleet, is the floating drydock.

Floating drydocks made their reputation in World War II. They enabled many ships that were damaged in combat to receive repairs near the battle zone. In most cases the damaged ships were repaired in short order and returned to the fighting.

The usefulness of these facilities did not end at that time. Their services are still important today.

The operating area of the Pacific Fleet covers more than half of the earth's surface. Through the waters of the Western Pacific, from the Sea of Japan to the Equator, from the Gulf of Siam to Guam, sails the Seventh Fleet.

Composed of more than a hundred ships of many different types, its ready power preserves peace. However, if each time one of these ships needs repair it had to be routed to a far-away shipyard, the Fleet's operations would be greatly hindered. A combatant ship would be out of service for many months, leaving a hole in our line of defense.

INSIDE JOB—Hard-hatted dock worker mans gear in floating dry dock.



Floating drydocks plug these holes. They can be stationed anywhere in Pacific waters. These units service the Fleet near their operating area and insure that no ship is out of service for long periods of time.

In time of war, ships can be given full repair attention in the battle area. Priceless time and effort is saved, and the enemy cannot be sure that a damaged ship will be out of action permanently. During the Cold War era, ships may be repaired quickly, enabling them to remain in the operating area. Their job is one of watching and waiting, in case a flame is lighted to take the chill off the Cold War.

In addition to these units, three major repair facilities in the Western Pacific are controlled by Commander Service Force Pacific. These include floating and graving drydocks.

The drydocks find plenty to do.





FULL HOUSE—A cruiser receives repairs, and eight LSTs are worked on by floating drydocks during World War II.

In a single month during mid-World War II (March 1944) 261 vessels were repaired. Included in this figure were battleships, cruisers, destroyers and destroyer escorts, attack transports, tank landing ships and submarine chasers. During the same period, smaller floating drydocks made repairs to 110 vessels. This figure included destroyers and landing craft.

THE DUTY of these Service Force units is not merely to keep abreast of combatant fleet activities. They plan as far ahead as possible by being prepared in all respects, before assistance becomes a problem.

These Service Force units dock a never-ending stream of vessels. They inspect and overhaul sea valves, make rudder repairs, adjust and repair sound gear, and do miscellaneous work below the waterline. Workers sandblast the hulls and cut away tubeworms, barnacles, and other hitchhikers of the sea. After a ship has been in the water for a year or two, a mass of marine life—thick enough to slow down the most powerful vessel afloat—attaches itself to the hull. It must be removed.

The floating drydocks are normally moored in sheltered waters, and can be lowered to lift ships out of the water for repairs. The drydock's tanks are flooded for submerging and then pumped out after the damaged ship has been floated into position. The drydock's hull rises and the ship, braced within the enclosure, is ready for repair work.

Auxiliary Repair Drydock 30 (*ARD 30*) is one of two Pacific Service Force floating drydocks located at Pearl Harbor, Hawaii. She is a miniature floating shipyard—with machine, pipe, repair, and carpenter shops. Primarily this unit's mission is to service submarines. However, she can make extensive

DOCKED DOCK—AFDL is docked in medium auxiliary floating drydock. *Right:* Keel blocks stand ready.





repairs not only on subs but also on destroyers and other types of ships. She has drydocked an average of one submarine every two weeks. During an average two-week overhaul period the *ARD 30* crew repairs the submarine, changes propellers and paints the craft below its waterline.

This facility does its own block cutting and setting. When a sub is docked for repairs, she is seated on pre-cut, tailor-made blocks. They hug her keel and brace her in place while the drydock crew makes repairs and adjustments.

OTHER TYPES of floating drydocks with the Pacific Fleet Service Force are small auxiliary floating drydocks (AFDL), and medium auxiliary floating drydocks (AFDM).

The various floating drydocks carry their own electric power generating plants, evaporators, boilers, air compressors, machine and welding shops. Some are equipped with 20-ton traveling cranes which serve rigging purposes.

The crews of these units haven't been forgotten. Bunking, mess and galley accommodations are provided. Heads, showers and medical facilities are installed, making them self-contained and suitable for offshore operations.

Like the combatant ships of the Fleet, which must be ready to keep the peace, the Service Force floating drydocks have a tough assignment —to keep the ships "Mobile and Ready." This they do, and very well.

—Gerald R. Boling, JO1, USN



WHAT'S UP DOCK?—*USS ARD 30,* viewed from fantail gate, stands ready to receive the next ship needing service.



Naval History—By the

WHEN NAVY SHIPS begin to show the scars of their steady battle against the sea, the weather, and the march of time, they are sidelined in the slips and drydocks of naval shipyards. Yard workers come aboard. Cranes lift off old machinery and load aboard new equipment. The ships are chipped, painted, repaired and modernized. And then, once again, they are sent into the Fleet to serve with the seagoing Navy.

This has been going on for over a century and a half.

It all began in 1794, when Congress authorized the construction of six frigates which were to be built for the Navy in shipyards at Portsmouth, Boston, New York, Philadelphia, Baltimore and Norfolk. The workmanship was more than satisfactory, for two of those ships—*USS Constitution* and *Constellation*—are still afloat.

The first shipyards were about as complicated as the young Navy they served. Little more than careening grounds for the wooden sailing ships of the era, their most highly skilled workers were carpenters and blacksmiths. At that time a carpenter



earned $1.50 per day and a blacksmith—a good blacksmith—earned as much as $2.50. A ship of the line could be built for $300,000.

As the Navy grew in size and complexity, the yards expanded to meet increasing demands. Construction of the first two Navy drydocks began in 1827 at the Boston and Norfolk shipyards. Soon after the completion of the docks steam power began to replace sails, and machine shops became commonplace in Navy shipyards. Then came the ironclads, with accompanying foundries and metal shops.

As the shipyards grew in size, the original organizations were replaced by new administrations with new management techniques.

AS TIME PASSED, the role of the naval shipyards became more important. In the sailing days, most captains could arrange for the repair of their ships with equipment on hand, if necessary. But as the machinery of naval warfare became more advanced, ship commanders were at a disadvantage when faced with major repairs without the equipment and skilled manpower available at shipyards. By the beginning of World War II, the Navy had reached the point where technological advances had made it necessary for all major repairs to be accomplished at a repair facility. It was at this time that the efficiency of naval shipyards began to have a noticeable effect on the outcome of naval engagements.

A case in point is the story of the aircraft carrier *USS Yorktown* (CV

A BIG ONE—*USS Independence* (CVA 62) goes under the cranes at New York Naval Shipyard in Brooklyn, N.Y.



Yard

5), damaged in the South Pacific.

On 27 May 1942, *Yorktown* limped into Pearl Harbor Naval Shipyard. Her progress north from the battle zone had been impeded by a Japanese bomb which had smashed through her wooden flight deck and exploded six decks down during the Battle of the Coral Sea. At the same time, several near misses had opened her hull seams and riddled her sides with shrapnel.

Yorktown's repair was priority, but during the early days of the war almost all repair jobs were priority. In addition, manpower was at a premium and the shipyard was still in the process of reconstruction after the devastating surprise attack of December 7.

Nevertheless, *Yorktown* was moved into a drydock and boarded by Pearl Harbor's engineers and mechanics. Work progressed night and day and, before the job was finished, 1400 men had taken a hand in the operation.

On 31 May, after just four days in the yard, *Yorktown* was ready to steam. She stood out that morning to join *USS Enterprise* (CV 6) and *USS Hornet* (CV 8) as a part of the task group operating near Midway. On 4 June an air attack from the planes of four Japanese flattops opened the Battle of Midway.

THE REST IS HISTORY. The three U.S. carriers and their air groups, fought and defeated the enemy force, sinking the Japanese carriers *Kaga* and *Soryu* and damaging *Akagi* and *Hiryu* so badly that they had to be sunk. And, though *Yorktown* later sank as a result of the conflict, her planes had taken an important part in the operation.

Historians later called the engagement one of the most decisive battles in naval history. But if *Yorktown's* repairs had taken one day longer, and the enemy carriers had been met by only two U. S. CVs, the outcome could have been different.

Peacetime accomplishments of the Navy's shipyards are seldom so spectacular. The work, however, is no less complicated and demanding. Almost a half-billion dollars is expended annually at Navy shipyards repairing, modifying, and converting



GULL'S VIEW—Photo shows size of Norfolk Naval Shipyard at Portsmouth, Va.

Navy ships of various categories.

Although some of the work is of a routine nature, there are many jobs which challenge the ingenuity of shipyard engineers and designers. One peacetime project in this category was the conversion of the submarine tender *USS Proteus* (AS 19), which was being equipped to support *Polaris* submarines. It turned out that the original *Proteus* just wasn't quite large enough, so Navy officials decided to cut the ship in half and add an extra midsection. The work was done at Charleston Naval Shipyard. The ship was cut, a 44-foot "plug" weighing 500 tons was welded into place, and the ship was outfitted for her new duties.

ANOTHER BIG JOB, which will continue for many years in shipyards

SPRUCING UP—Navymen prep ladder for painting while ship is in the yard.





OLD OLD TIMER—Ship is careened at Gosport, now Norfolk Naval Shipyard, which is older than the U.S. Navy—having been established by British in 1767.



SPLASH—*Old Ironsides, USF Constitution,* is launched at Boston Shipyard.



YEARS AGO—Activity in Navy Yard at Washington, D. C., is shown in drawing. *Below:* Puget Sound Naval Shipyard looked like this at turn of century.



throughout the country, is the Fleet Rehabilitation and Modernization (FRAM) program. The project called for building new life into many of our aging ships, including the aircraft carriers *USS Boxer* (LPH 4) and *USS Essex* (CVS 9), a large percentage of the Navy's DDs, and several LSTs.

The destroyer segment of the program (to be completed next year) is by far the largest. It called for the entire superstructure to be cut away and replaced by all-aluminum construction. Many of the completed FRAM destroyers are equipped with facilities for the *Dash* antisubmarine helicopter and carry *Asroc* launchers.

Today our 11 naval shipyards are manned and equipped to handle not only such jobs as *Proteus* and the FRAM program, but to meet all the maintenance needs of our modern, complex Fleet.

Successful completion of a job depends on proper planning, skilled manpower, and modern equipment. The two largest departments of every naval shipyard are Planning and Production. These departments come under the supervision of a shipyard commander—usually an officer of flag rank—and are assisted by a number of smaller departments.

THE PLANNING Department receives each work request submitted to the yard. The request is screened by skilled planners and estimators who decide what must be done, who should perform the work, how they should go about it, and what plans and materials they will need.

Work requests are usually broken into two or more work orders by the planning department. A work order is a specific instruction which is sent to a particular shop. A complex job, which requires the support of the inside machine shop, the outside machine shop, the electric shop and the foundry, and which requires the support of a shipyard crane, might be subdivided into five work orders.

After the planning is completed, the work orders are sent to the Production Department, the largest in the yard, for distribitution to the proper shops. These shops include all the trades necessary to ship work —machinists, electronics mechanics, electricians, welders, shipfitters, shipwrights, sheet metal workers, boilerman, foundrymen, etc.

THE SUPPLY and Public Works Departments provide support to pro-



TAILOR MADE—*USS Proteus* (AS 19) is split in half at Charleston Naval Shipyard for insertion of new midsection.

duction and to the shipyard in general. The Public Works Officer is expected to furnish steam, water, electrical power and transportation (including cranes), and to keep the shipyard's machinery and buildings in good repair, while Supply makes sure the material, parts, and equipment required for each job are on hand when needed.

Shops are standardized throughout the Navy. They are divided into 31 specialized trades, but no single shipyard has the maximum number. Norfolk Naval Shipyard has 26 shops, more than any other yard in the Navy.

Six of the Navy's 11 shipyards are located on the East Coast, four on the West Coast and one in Hawaii. They are: Boston Naval Shipyard at Boston, Mass.; New York Naval Shipyard at Brooklyn, N. Y.; Pearl Harbor Naval Shipyard at Pearl Harbor, Hawaii; Puget Sound Naval Shipyard at Bremerton, Wash.; Charleston Naval Shipyard at Charleston, S. C.; Philadelphia Naval Shipyard at Philadelphia, Pa.; Portsmouth Naval Shipyard at Kittery, Maine; Norfolk Naval Shipyard at Portsmouth, Va.; San Francisco Naval Shipyard at San Francisco, Calif.; Mare Island Naval Shipyard at Vallejo, Calif; and Long Beach Naval Shipyard at Long Beach, Calif.

THE LARGEST is the New York Naval Shipyard in Brooklyn, where 11,000 persons are employed. The smallest, at least by manpower standards, is the Pearl Harbor Naval Shipyard, employing 4800 persons. Although Pearl Harbor's yard is the smallest maintained by the Navy, it employs more people than any other single employer in the Hawaiian Islands.

The Navy's largest drydock is located at Puget Sound and measures 1150 feet in length, 78 feet in width, and is 47 feet deep. Seven Navy shipyards have drydocks large enough to dock the 75,000-ton *USS Enterprise* (CVAN 65).

Although all shipyards have a general ship repair capability, many also perform specialized work. Attack aircraft carriers, for instance, usually go to shipyards at New York, Bremerton, Norfolk or San Francisco. The overhaul of nuclear submarines usually takes place at Portsmouth, Charleston, Vallejo and Pearl Harbor. Norfolk and Puget Sound will soon be in the nuclear overhaul category.

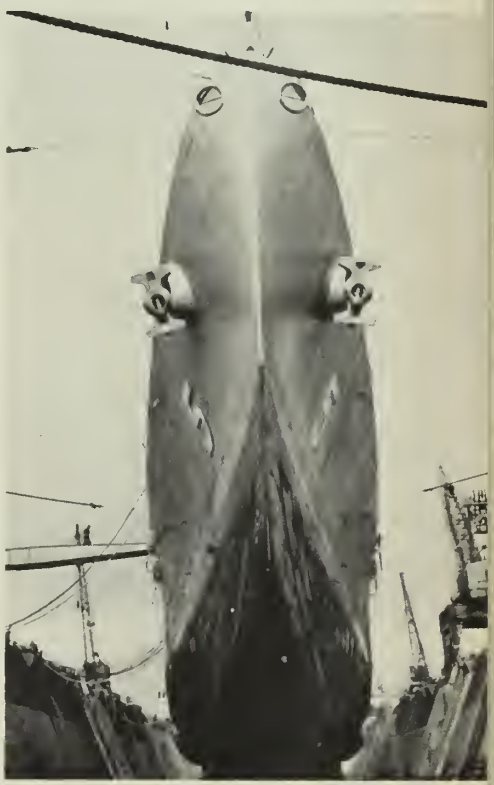
NAVAL SHIPYARDS also have another major function—they undertake new construction of Navy ships. For example, New York Naval Shipyard is now working on four LPDs; Portsmouth, N. H., and Mare Island, Calif., are building SSNs and SSBNs; Philadelphia is constructing an LPH; Puget Sound is at work on three DLGs, an AOE and an AS; and San Francisco is building a DLG.

In addition to keeping the ships of the Fleet ready to sail, today's shipyards form a nucleus for rapid expansion in time of emergency. This ability to grow overnight was demonstrated at the beginning of World War II, when thousands of men and women were hired and trained in a matter of weeks, by those already on duty with the shipyards.

As the ships of the Navy continue to keep pace with the technology of modern warfare, our shipyards must be ready to meet their maintenance needs. Their basic mission, of course, will remain the same as it was when the first yards were created by Congress in 1800.

The shipyards exist to serve the Fleet.

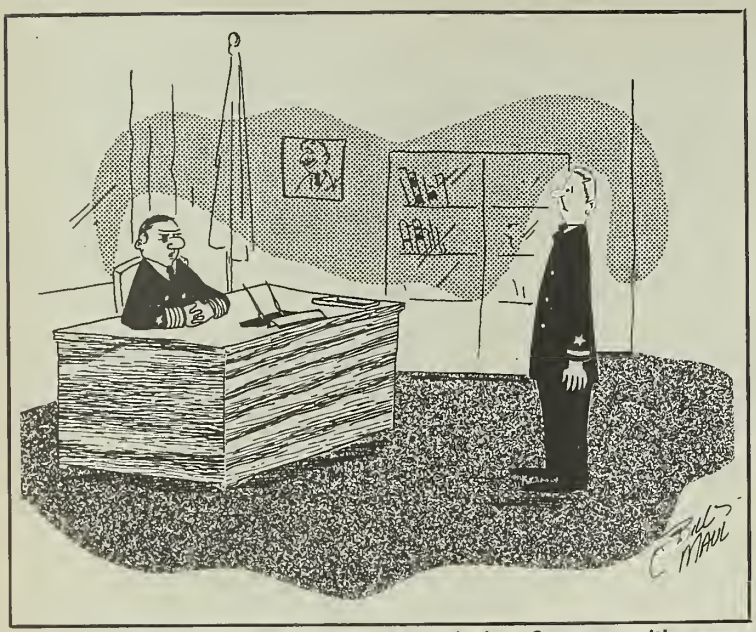
—Jon Franklin, JO1, USN



DOCKED—*USS Oklahoma City* (CLG 5) rests on blocks at San Francisco Naval Shipyard. *Below:* Navy and Yard men keep Fleet in top shape.

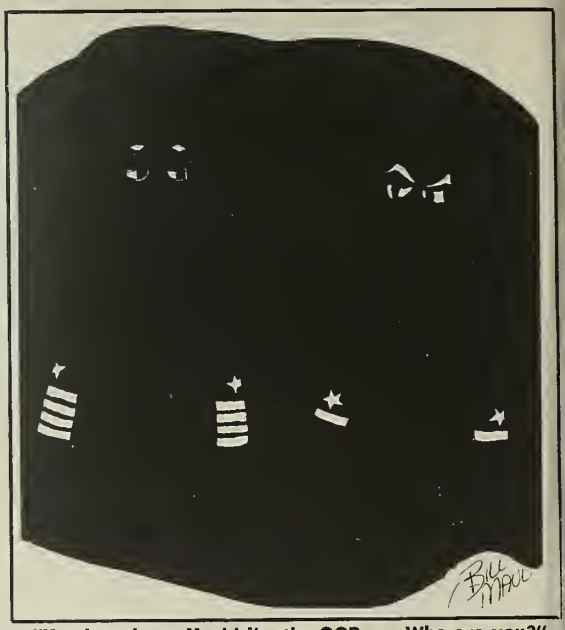


FIRST W. R. Moul, CTCA, USN



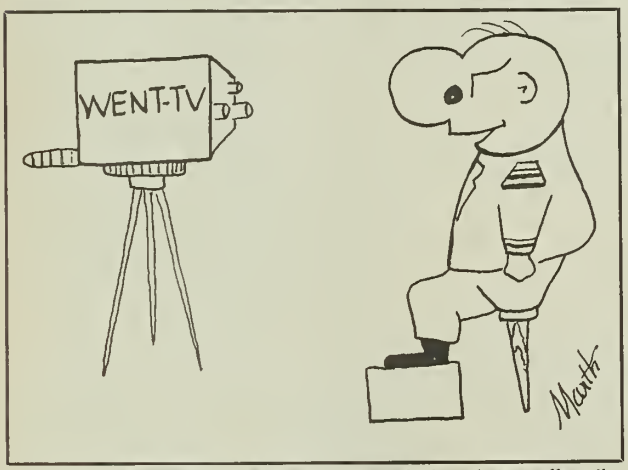
"The inspection team arrives tomorrow, Higgins. Come up with some figures that show this command is leading in SOMETHING!"

SECOND W. R. Maul, CTCA, USN



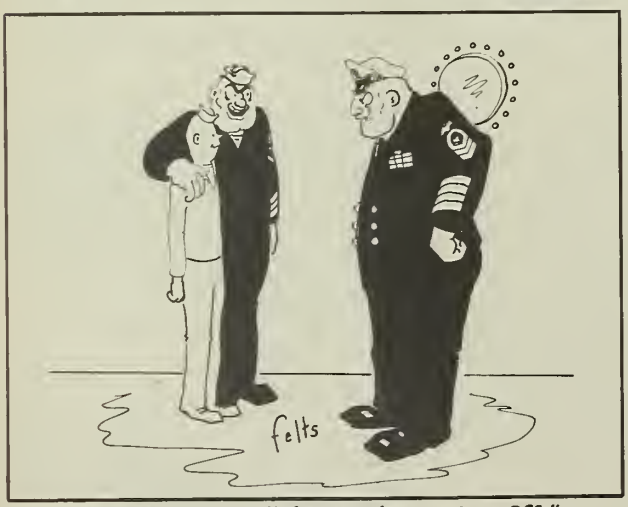
"You heard me, Moe! ! I'm the OOD . . . Who are you?"

THIRD A. C. Morth, SN, USN



"My lecture today will be 'Sofety Around Aircroft Propellers."

FOURTH J. E. Felts, SH1, USN



"He'll be with us until the next class starts at OCS."

Champs With an All-

A FUNNY THING happened on the way back from lunch the other day. We stopped in at a conference room in the Bureau of Naval Personnel, where judging of the 1964 All-Navy Cartoon Contest had just been completed.

It was a routine assignment. We were to pick up the winning cartoons so they could be published in ALL HANDS.

The room was empty. Spread all over the conference table were the best of the original cartoons that had been sent in from all corners of the naval establishment. The jury had postponed the job of picking-up-afterwards so as not to miss lunch.

There was nothing to do but wait, so we plopped

FIFTH LT P. B. Kincade, USN

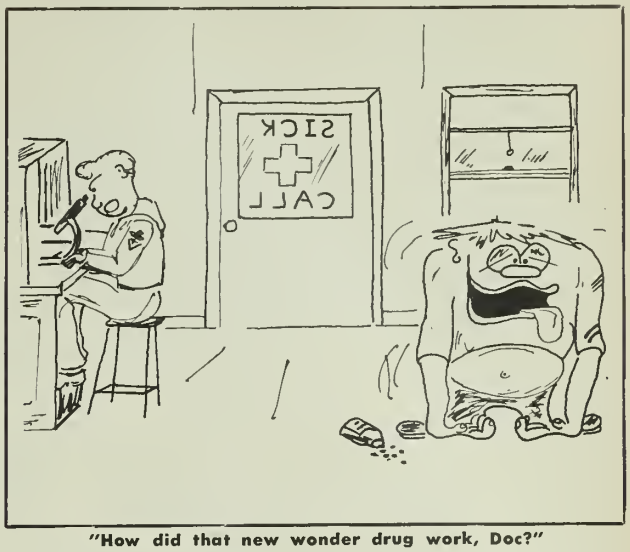


"I'm sorry, Admiral, I've stomped on it and kicked it for an hour, but I just can't break your flag!"

FIRST HONORABLE MENTION W. R. Maul, CTCA, USN



SECOND HONORABLE MENTION G. P. Brines, HN, USN



"How did that new wonder drug work, Doc?"

Navy Sense of Humor

down in the nearest chair and propped our feet up on the corner of the table. Our eyes strayed to the pile of entries.

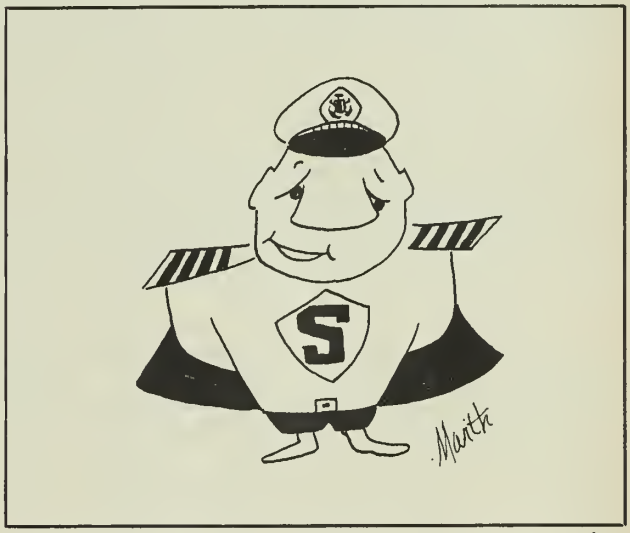
Temptation soon won out, and we reached for the cartoon nearest us. The first one made us snort. We reached for another one, and started to chuckle from somewhere around the mid-section.

The next cartoon gave rise to a full belly roar. Only seconds elapsed before we found ourselves afoot, unsystematically grabbing up and discarding drawings from the heap of cartoons spread before us. Our vision by this time was blurred by tears.

Relying on support from one hand to keep us from tilting over backwards during a guffaw, we moved

(Continued on page 22)

THIRD HONORABLE MENTION A. C. Marth, SN, USN



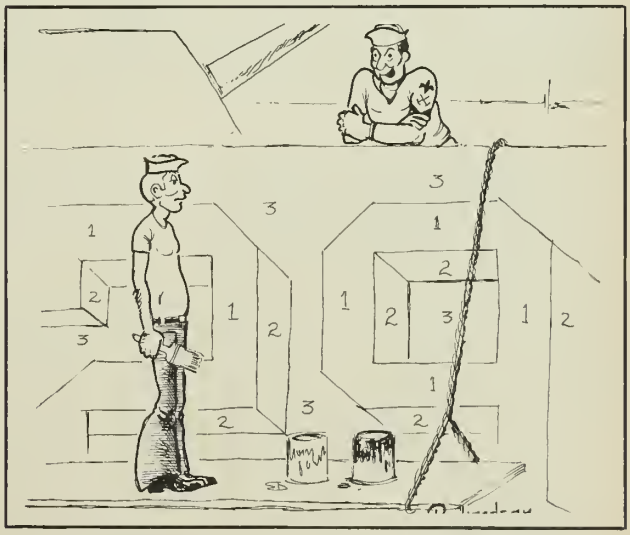
"Now men, I'm your new Captain. Don't expect too much, but . . ."

FIFTH HONORABLE MENTION E. M. Mawn, Jr., CT1, USN



"What a swell guy . . . said a most wasn't good enough for me . . . He's gonna give me a special something or other!"

FOURTH HONORABLE MENTION S. C. Richardson, PHAN, USN



"It's very simple, you just paint by the numbers."



COAST TO COAST—ComPhibPac band greets *USS Mount McKinley* (AGC 7) with 'California Here I Come' as she arrives at San Diego, her new home port.

'Digital Thinking'

As digital computers come into wider use in the Navy, there is a corresponding requirement for more trained personnel to operate them. Various Navy-operated schools provide just that.

The results of a recent training course conducted at Naval Ordnance Test Station, China Lake, Calif., however, tend to strengthen the possibility that much of this training and learning might be done under on-the-job circumstances.

The men picked to operate this experimental facility didn't know what it was all about. None had ever been exposed to computers.

A training program, designed specifically to teach the China Lake men what they would need to know for this particular job, was prepared by the Naval *Typhon* Training Unit, Baltimore, Md. Two instructors who were detailed to China Lake administered the 220-hour course to 19 enlisted men (ranging from seaman through CPO), two officers and one civilian engineer.

The course was titled "Basic Fire Control Digital Techniques," and the curriculum covered seven areas: transistor theory; numbering systems; Boolian algebra (which is used in computer mathematics); basic digital circuits; basic digital computer; fundamentals of programing and peripheral equipment.

Although the trainees had no previous experience in the field, their instructors—E. V. Hallen and A. P. Taylor, both FTCs—felt that they bridged the gap most successfully.

According to Hallen the purpose was to introduce the trainees to the basic techniques of digital devices and their applications—which, in his terms, boils down to "digital thinking."

Although the final test will come in the months ahead, when the class members start operating the equipment, he thinks the objectives of the course were achieved.

The skills and knowledge gained by this class may have a value well beyond the immediate goal. Possibly, it could point the way for some reduction in the formal training time required for digital training.

Sylvania Will Sail for LantFlt

The commissioning detail of *Sylvania* (AFS 2) expects to chalk up a number of Navy firsts. As *Sylvania* is scheduled to be the only ship of her type assigned to the Atlantic Fleet, it shouldn't be difficult.

Almost everything she does will be a first.

Built in Long Beach, Calif., she will be the first AFS to transit the Panama Canal, and the first to conduct shakedown at Guantanamo.

As well as the first AFS to deploy to the Med.

And the first to re-supply the atomic task force consisting of USS *Enterprise* (CVAN 65), USS *Long Beach* (CGN 9) and USS *Bainbridge* (DLGN 25).

Sylvania will be commissioned this month. She is the sister ship of USS *Mars* (AFS 1), which was the first of the type and now serves in the Pacific.

The AFS is designed to combine in one ship the resupply capability of the refrigerator ship (AF), the general stores ship (AKS) and the aviation supply ship (AVS).

Sylvania will displace about 17,500 tons when fully loaded.

Winners in All-Navy Cartoon Contest (Cont.)

slowly around the table. Weak and still only a quarter of the way through the assortment, our eye happened to focus on the doorway. There stood the jury, back from lunch.

No need for explanation—the situation was all too obvious, so our introduction was in the way of "What did you think of *this* one!"—followed by another unmuffled burst of laughter.

The jury had resolved a tough proposition, and handed over the winning cartoons, which we show here. Thankfully, the top non-winners will also be shown in ALL HANDS during the forthcoming year.

Bill Maul, CTCA, USN, of U. S. Naval Security Group, Bremerhaven, Germany, winner of the ninth annual All-Navy Cartoon Contest, is no stranger to the competition. His jury-pleasing material is again fresh and humorous—enough so to win for him three of the top 10 places.

Albert Marth, SN, stationed aboard USS *Enterprise* (CVAN 65), won two places with his entries, and five other cartoonists—Jackie Felts, SH1, USS *Pine Island* (AV 12); LT Paul Kincade, Staff, COMSERVPAC; George Brines, HN, U. S. Naval Hospital, Great Lakes; Sam Richardson, PHAN, Heavy Photographic Squadron Sixty-One; and Ernest Mawn, Jr., CT1, USNSGA Skaggs Island—copped the other five places.

Hats off to the winners, and good luck in next year's contest. You'll find more cartoons in Bulletin Board.





Visit to Shimoda

THE WEATHER was clear and the day was sunny, quite appropriate to commemorate an auspicious occasion. Precisely at 0830 *USS Prairie* (AD 15) and *USS Collett* (DD 730) entered the port of Shimoda, Japan, rendering an 11-gun salute.

This started the 25th annual Black Ship Festival commemorating the arrival of Commodore Perry at this small fishing village in the month of May, 1854. Perry's visit not only opened the door to commerce between the two countries but also marked the beginning of intellectual exchange between the East and West.

Following the visit of the Mayor of Shimoda to the commanding officers of the two ships, boatload after boatload of local citizens came out to visit. At the end of three days in port over 3000 visitors had taken the guided tour of *Prairie* and *Collett*.

Sunday was a day set aside to honor the achievements of the "Black Ships". Festivities began with a parade that included representatives from the U. S. Navy and Japan. It wound through the narrow streets to the Memorial Park, for the formal ceremony.

Clockwise from upper left: (1) *USS Prairie* (AD 15) moors at Shimoda. (2) *Prairie* men watch Black Ship Festival parade. (3) Boatload of visitors pulls alongside. (4) Souvenir photo is taken with Japanese children. (5) CAPT Kenneth Steen, CO of *Prairie* greets young citizens of Shimoda. (6) Navy player swings away during game with Shimoda all stars.









LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

BuPers Is Everyone's Friend

SIR: What way, if any, is there to inquire about Seavey status without bugging the people in the Bureau with long-distance phone calls or having a "friend in the Bureau" check for you?

There are many cases where this information would be very helpful. In my case, I would like to know if I will receive orders ashore this year because, if not, I plan to buy a house in my home port. I know other people who have the same question, but don't want to phone to see how high they stand on the list.—J. E. D., DK2, USN.

• *The best place to check for information on your rotation ashore is at your own personnel office. You might as well save yourself the expense of long-distance phone calls in this regard.*

Judging from your inquiry, you feel it would be helpful to know how high you stand on the Seavey list. This is not necessarily so.

Once you qualify for Seavey, just when you will be transferred is determined by: (a) How long you have been on active duty in comparison with other men on the Seavey with the same rate and rating; and (b) whether a vacancy occurs in the area of your choice.

When assignments are made, men in your rating who request the same duty and have been on active duty longer than you will normally be transferred first. Thus, no one at the Bureau would be able to give you definite information on the date of your transfer until such time as a billet becomes available in an area of your choice, and you qualify for assignment to that billet. Although Seavey tries to assign you and other men in your segment to shore duty before the following segment comes up for consideration, this may not always be possible, due to excesses in certain ratings on a particular Seavey.

Once you have been selected for a billet, a 1A card is mailed to your CO indicating the month you will be transferred. This lapse of time from when the Bureau knows your transfer month and when you are informed amounts to a matter of days—just as long as it takes your 1A card to go through the post.

Your main concern is to check the Enlisted Distribution and Verification Report (1080-14) at your personnel office. Make sure your status is listed correctly (Code 20 on your entry means you are on effective Seavey).

If you are eligible for assignment ashore and the information is recorded correctly on the 1080-14, you must then rely on the system to give you a fair shake—as do some 585,000 other Navymen. You will receive your orders three to four months before transfer. No "friend in the Bureau" or any other source could give you reliable dope earlier than that.

Incidentally, if you haven't done so already, we suggest you read the Seavey/Shorvey Report in the June issue of ALL HANDS *for further information on this subject.*—ED.

Waivers for Sub Duty

SIR: I am interested in assignment to submarine duty. I understand that, to qualify, an individual must have a combined GCT/ARI score of 100.

My combined score is 95. Are exceptions ever made in such cases?—F. R. L., TN, USN.

• *There is a possibility that you may receive a waiver.*

Personnel in other than ET, MM, EN, EM, IC and HM ratings must have a minimum combined GCT/ARI score of 100. Those in the ratings listed above must have a combined score of 110.

The Enlisted Transfer Manual, chapter 10, lists the other eligibility requirements, and sets forth the procedure to follow when requesting submarine duty.

When your request is forwarded to BuPers, your CO's recommendations concerning a waiver will be considered. Your service record is reviewed as a final determining factor, and the waiver may or may not be granted.—ED.

Medal for Taiwan Strait?

SIR: Is there such a thing as a Taiwan Service Medal? If so, what are the criteria for its award?—M. D. G., PN2, USN.

• *You are probably referring to the Armed Forces Expeditionary Medal, established by the late President Kennedy by Executive Order 10977 of 4 Dec 1961. The medal is awarded to recognize the services of military personnel who participate in certain Cold War operations. Services which merit such recognition are determined by the Joint Chiefs of Staff.*

Taiwan Strait is the site of one of the Cold War "incidents" for which the medal is awarded. Lists of eligible ships and units will be published soon in change one to SecNav Inst. P1650.1C of 16 Aug 1963, Subject: "Navy and Marine Corps Awards Manual."—ED.

Midnight Oil Will Smooth Your Way

SIR: In a previous Letters to the Editor section, you listed a number of suggested publications for prospective senior and master chiefs to use as study material. Would it be possible for you to list the names of some of the books in the categories of specialty handbooks, popular psychology books and vocabulary development books? Also, where can I obtain college entrance examination study material and high school subjects self-taught publications?

Is it possible to obtain these publications from the local I & E office?—J. W. P., YNC(SS), USN.

• *Your question, for the benefit of other readers, concerns study materials for the common knowledge (or reasoning ability) section of the E-8/E-9 exams, which we discussed in the February 1964 issue.*

Our information, in this case, is general. It is established policy that in cases such as this the Navy cannot recommend books by any one publisher. But we can tell you this:

Specialty hand books are those which pertain to your rating. As a yeoman, you would be interested in books on such subjects as administration and personnel management. Personnel in electronics ratings, as another example, should consult books on electronics.

The popular psychology books and vocabulary books are many and varied, and we cannot mention any particular one. These books are intended to enhance your reasoning capability and better your understanding of the English language.

College entrance examination study material books are available in the larger station libraries or may be purchased for approximately a dollar from newsstands in the various exchanges or public newsstands. A self-study book on high school subjects is widely distributed throughout the Navy by the Library Services Branch, BuPers.

Because of the large concentration of enlisted personnel in your area (Norfolk), it is probable that most of these books are stocked by the station library. We suggest that you check there first,

and as an alternative, stop in at the local city library for assistance.—ED.

Those PUCs Have to be Earned

SIR: During World War II, I was in USS *Tirante* (SS 420) when she was awarded a Presidential Unit Citation. At that time, we wore a star on the ribbon if we were on board when the award was earned. Others, who were attached to the unit later, wore the ribbon without the star.

As you undoubtedly know, the manner of wearing this award was subsequently changed. I have, however, seen a number of men—even young seamen—wearing the PUC ribbon without a star. When questioned, they tell me they are wearing the ribbon at the direction of their CO because the ship earned a PUC during World War II.

This, of course, is contrary to the latest regulation and apparently indicates the change (which dates back to 1957 or 1958) didn't find its way into many copies of the *Awards Manual.*

Would you please pass the word on how and when the PUC ribbon should be worn?—J. P. S., LT, USN.

● *You have raised a good point, and we'll be happy to oblige, sir. Since 1957, when SecNav Notice 1650 changed the manner of wearing the PUC (later incorporated in a November 1958 change to the "Navy and Marine Corps Awards Manual"), only those men who actually participated in the cited unit during the action which merited the commendation are permitted to wear the ribbon (without a star) permanently.*

Men who participate in subsequent action on the same or another ship or with another unit which earns a PUC are entitled to add a star for each action which is cited by the President.

Men who join a cited unit after the dates of citation are not entitled to wear the ribbon bar even while attached.—ED.



SUB HUNTER—Navy's P-3 *Orion* is shown with three types of mines it can carry in its submarine-killing arsenal.

Family Separation Allowance

SIR: When a man goes overseas now, he must request clearance for his dependents. If clearance is denied because there isn't enough housing, or for some other reason, he would be able to draw the family separation allowance for the length of the separation. But suppose an enlisted man received orders assigning him to duty ashore outside the area of his duty preferences through the Seavey program. Isn't he then entitled to FSA?

Let's say that an enlisted man with six dependents is stationed aboard a ship homeported in Long Beach and owns a house there.

Then he receives orders to a squadron ashore located at North Island, San Diego.

Navy housing is not available, and to be with his family he has to travel about 220 miles daily when not on duty. He never requested shore duty when he filled out the Rotation Data Card. In addition, he has to pay $.90 daily for ferry transportation from San Diego to North Island.

Would he be eligible for FSA for the length of the separation?—T. C. R., YNC, USN.

● *In this case, he would not be entitled to family separation allowance because he does not meet the necessary conditions.*

He was transferred from ship to shore station on PCS orders. The movement of his dependents to San Diego is authorized at government expense on these orders, so he is not eligible for FSA-R.

But he can qualify if he is deployed away from his permanent duty station with his squadron for more than 30 days continuously. Then he would be entitled to FSA-T (Temporary and Temporary Additional duty), provided, of course, he meets the other conditions to receive this allowance.

If you want to know more about FSA, see SecNav Inst. 7220.46A.—ED.

Sea Chanters

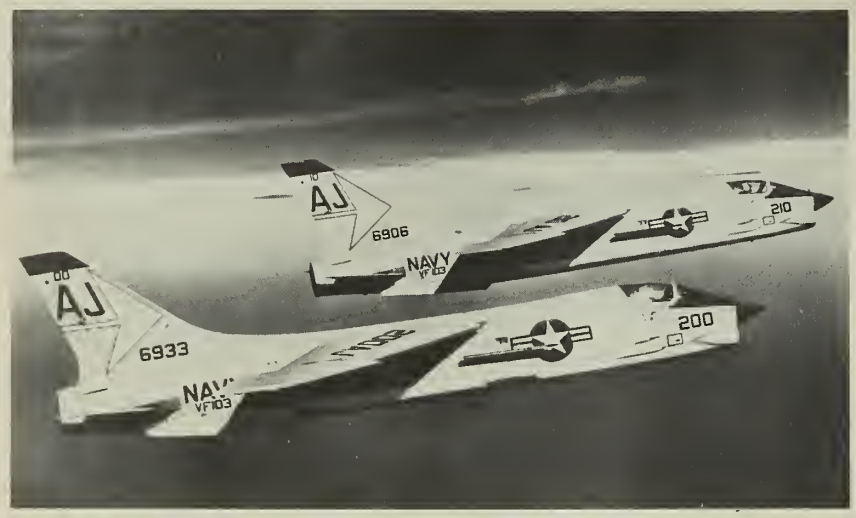
SIR: I have heard that there is a Navy choir. If this is so, can you give me information as to how I might become a member?—A. P. Z., PN 3, USN.

● *The Sea Chanters, attached to and serving with the U. S. Navy Band, is the Navy's vocal group. When vacancies occur in this group they are filled by personnel in the musician rating, on active duty in the Navy, who, in addition to their instrumental proficiency, have a record of outstanding training and experience in the field of vocal music.*

As an alternative, you might wish either to join or organize a singing group or choir at your present duty station. Let us know the results.—ED.

HITCHED—An A5 *Vigilante*, capable of over Mach Two, is readied for launching from *USS Enterprise* (CVAN 65).





SIDE BY SIDE—F-8 *Crusaders* cut through the blue. Two-position wings enable F-8s to fly at twice the speed of sound and slow enough for carrier landing.

The Problem of Precedence—Again

SIR: Please advise how Marine enlisted precedence fits in with that of the Navy. I know that Marine enlisted seniority is determined by date of rank within each pay grade. Navy enlisted precedence, for men in the same pay grade, is determined by the rating held —regardless of time in pay grade.

Is it possible to establish an enlisted Marine's seniority (for military matters) in a Navy-administered command? Must a Marine, in this case, fall at the bottom of the precedence list in his pay grade, or can he be phased in according to his specialty?

Here's a hypothetical case:

At a Navy-administered command, there are a YN1, BM1 and Marine staff sergeant working together on a detail. The YN has three years in grade; the Marine two years in grade; and the BM one year.

Where does the Marine fit in for matters of military precedence?—E. C. G,. YNC, USN.

• *A definitive answer to your question cannot be given, since Navy and Marine Corps enlisted precedence systems are not compatible for military matters. In the hypothetical case cited, it would appear that the proper solution would be to phase the Marine in in accordance with his specialty, if possible.*

For your information, the Navy is considering a change to its enlisted precedence policy. If the change is effected, precedence would be based on time in pay grade (similar to the Marine system), and the rating held would not be considered.—ED.

Good Conduct Means Just That

SIR: The *Navy and Marine Corps Awards Manual* lists a number of eligibility requirements for the good conduct medal. But personal matters—such as indebtedness—were not included.

I think indebtedness is a discredit to the Navy and should be sufficient grounds to disqualify a man who continually refuses to pay his just debts.

Recipients of the good conduct medal should be qualified in all respects, personal as well as military.—R. J. N., USN.

• *We agree. So do the people in the Decorations and Medals Branch. And so does the current edition of the "Awards Manual."*

Presumably you found your information in the old "Awards Manual" (NavPers 15,790), which was superseded by SecNav Inst. PI650.1C in August 63.

As you said, the old Manual did not mention debts. But the new one, in addition to itemizing the usual qualifications, inserted a clause by which the award could be refused on the grounds of indebtedness.

You can find the particulars in Article

A Few Notes About Destroyer Duty

SIR: As an eight-year Navyman who had spent his entire career on the beach you can imagine that I boarded USS *Uhlmann* (DD 687) for my first sea duty, cursing the Seavey-Shorvey process all the way up the brow.

Fortunately, the exec was on the quarterdeck, and he proved to be an amiable man. He invited me to his stateroom and had the yeoman I was to work with come in too.

When my working mate showed up I hoped he had a pleasant disposition because he was a big guy. He greeted me with a smile instead of a scowl, however, and I began to feel more at ease.

My first week in a destroyer confirmed every suspicion I had ever had about tin cans. I was seasick all the time. Eating was impossible, and I was covered with the cuts and bruises I received as I ricocheted from one bulkhead to another.

Nevertheless, my new job was a challenge, and I began to learn the routine aboard. Little by little I began liking life on board a destroyer.

After a month, *Uhlmann* left CONUS on WestPac deployment. By the time we reached Pearl Harbor, I knew all the officers on board and about half my shipmates.

We were stranded on Midway for repairs long enough for me to get to know the rest of the crew. On a small island like Midway, with time on your hands, you're bound to get acquainted.

After Midway came Guam, then Subic Bay in the Philippines. By this time, I knew a little bit about everybody's background.

The grumbling and complaining that had dismayed me in the beginning I now recognized as being as much a part of shipboard life as chow and the evening movie.

I was pretty sure by now that, although nobody would be caught dead admitting it, every sailor on board had a soft spot in his heart for his ship.

From Subic Bay we went to Kobe, Yokosuka, Sasebo, Hong Kong and Okinawa. If there is one thing you get to do in a destroyer, it's seeing the world.

Time at sea was spent on general quarters, refueling, replenishment, highline, light line and shipboard drills. Everybody had a job to do and, on a small ship like *Uhlmann*, comradeship is close.

Sailors on the big ships smother us in pity, especially during rough weather, saying we ought to have submarine pay. I wouldn't argue with the special pay bit, but they can keep their pity.

Life in a destroyer is a challenge and what is life without challenge? A Navyman with a destroyer patch on his shoulder is a salty sailor—a destroyerman is tough enough to survive just about anything.

On the last day at sea, I was thinking of San Diego and getting to see the family. I also thought of the weeks at sea, what I had learned and the fun I had had and, you know, I was sort of sorry the cruise was coming to an end.—Pacifico E. Almazar, PN1, USN.

• *We suspect that you aren't the first to feel this way. Thanks for a fine description of "life in a destroyer," and the destroyermen's spirit.*—ED.



MEETING THE DESTROYER NAVY—Secretary of the Navy Paul H. Nitze visited ComCruDesLant headquarters where he talked with destroyermen and inspected representative ships of the force. The Secretary boarded USS Barry (DD 933), Charles S. Sperry (DD 697) and CruDesLant flagship USS Yosemite (AD 19). On board the DDs he chatted with the men and watched demonstrations of ship's equipment. Left to Right: SecNav shakes hands with destroyermen R. E. Ellis, PN1, E. M. Refsland, SFC, and D. P. Marshall, EMC, of Destroyer Division 242.

531, page 5-7, of the new Manual. Roughly, it says that when the commanding officer feels a man should not receive the award due to a repeated record of valid indebtedness or other acts not in keeping with Navy standards, he should make an appropriate recommendation to the Chief of Naval Personnel.

The new Manual also requires that a Navyman serve four years with a clear record, instead of the three years previously required. This is part of the general tightening of regulations which will make the award a little harder to earn and, consequently, more meaningful.—ED.

Changes in Chiefs' Uniform

SIR: I've heard scuttlebutt that white and blue mess jackets have been authorized for chiefs. Is this true? If so, when must they be worn and how will rating badges be positioned?—R. A. P., BMC., USN.

• *The reports are true. But don't rush out and buy a mess jacket—you would probably never have an occasion to wear it.*

The jackets will become an optional part of the CPO uniform on 1 Jan 1965. They will be authorized by Change Three to "U. S. Navy Uniform Regulations," now at the printers.

CPO mess jackets will be authorized by a footnote to paragraph 0622—indicative of the effect it will have on most Navy chiefs. Mess jackets are worn only at black tie or white tie affairs.

Even if you are required to attend formal gatherings where mess jackets are prescribed for officers, you will not be required to wear one. The prescribed uniform for CPOs at such an affair will be his Dinner Dress uniform.

Rating badges and hashmarks for the jacket, if worn, would be exactly the same as are required for the CPO blouse. Miniature medals and breast insignia should be worn on the jacket in the same manner as prescribed for officers.—ED.

Corpsman Wants To Get In the Swim

SIR: In your January issue you mentioned a hospital corpsman who was a medical deep sea diving technician. I have always been interested in scuba and deep sea diving and would like to gather a little more information on the subject.

As yet I have not gone to Corps School, but will do so in August. How do I get into deep sea diving after that? —J. C. C., HA, USN.

• *First, upon graduation we recommend you get hold of the "Hospitalman 3 & 2" training manual and study it. You need to be HM2 or HM1 to be eligible to apply for the 26-week course for designation as a medical deep sea diving technician. In addition you must have 30 months of obligated service after completing the course which is held in the U. S. Naval School, Deep Sea Divers, Washington, D. C.*

You must also have a minimum ARI-MECH combination of 105 and be physically qualified in accordance with Article 15-30 of the BuMed "Manual." Additional selection requirements for diver training candidates are outlined on page D-10 of the "Catalog of U. S. Naval Training Activities and Courses" (NavPers 91769-F).

If by the time you meet these requirements you are still interested, you must volunteer for the course of instruction and be recommended by your commanding officer.

Upon completion you will be designated a medical deep sea diving technician with a NEC of HM8493. Just make sure the appropriate entry is put in your service record.—ED.

DUAL FUEL—*USS Mississinewa* (AO 144) pumps oil to *USS Forrestal* (CVA 59) from her port side and *USS DuPont* (DD 941) is fueled from the starboard.



Anchored in the Wrong Column

SIR: I note with considerable astonishment and interest the presence of naval shipyards in York, Pa., and in Yorktown, Va., as reported on pages 44 and 45 of your June 1964 issue. Isn't this reversing the trend of reducing the number of military establishments? I have passed through Yorktown and live in York, and haven't heard a word about either until ALL HANDS scooped the world. What gives?—G. V. B., York, Pa.

• *Shambles, utter shambles. That's what gives. Ever since we saw the printed version of the June issue, there has been no living with ourselves. We kick at the cat and snarl at our loved ones.*

We goofed. We dropped anchor in the wrong column, and voila! *However, there are no naval shipyards in York, Pa., and Yorktown, Va.*

And don't bother to tell us there isn't a shipyard in Salt Lake City, Utah, either, as reported on page 50 of the June issue. We know it. We'll be mighty careful about dropping anchors in the future.—ED.

Norris *Finds Another Way to Refuel*

SIR: It is with no little embarrassment that I attempt to clarify the circumstances behind the fueling of USS *Bristol* (DD 857) by *Norris* (DD 859). (See ALL HANDS, November 1963, page 28, and April 1964, page 25).

There's only one thing wrong with your most ingenious explanation concerning our transfer by means of a P-500 pump. We gave you bum dope in our original letter. It wasn't a P-500.

It is with a sense of contributing to an anticlimax to admit that we simply used our Number Two fuel oil transfer pump, taking suction on our after storage tanks.

If anyone is still interested, this was our procedure:

We pumped the oil through our transfer main to the deck connection at frame 92 and through two 25-foot sections of P-500 suction hose to *Bristol's* deck connection.

A double female coupling was used to adapt to *Bristol's* deck connection. The rate of transfer was 5000 gallons of fuel per hour.

Our faces are red but we hope this sufficiently explains the matter.—CDR K. J. Cole, USN, Commanding Officer, USS *Norris*.

• *Well, we asked* Norris *in our April issue, to explain her method of refueling* Bristol. *Commander Cole has told us, and it serves us right. Next time, we'll leave a good story alone.*

The whole thing may have served a purpose, however. If anyone feels inclined to use a P-500 pump for refueling, he can use the ALL HANDS *speculation on how* Norris *might have done it as a "How To Do It" Guide.*—ED.

Rhyming Log, Vintage 1929

SIR: Your reply to a letter to the editor last May asked if anyone knew of a rhyming New Year's log entry older than the one written.

The January 1959 issue of *Naval Institute Proceedings* printed an article on rhyming logs. The story included the last four lines from a log written in 1929 by Ensign E. V. Dockweiler in USS *Idaho* (BB 42) who was lucky enough to be standing the first watch of the year. He closed his poem like this:

That's all the dope this morning,
Except just between us two
If the Captain ever sees this log,
My gosh, what will he do?

The ensign evidently anticipated the old man's anger, but his fears were unfounded. When the skipper signed the log he added the following comment: "The captain is glad to see that the old Navy custom of writing up the first watch of the year in rhyme is known to the younger members of the service. The watch stands as written."

According to *Idaho's* captain, rhyming New Year's logs were already an old custom as far back as 1926.—Robert M. Derrit.

• *So rhyming logs have been traced back to before 1929. Years before that time, some miserable OOD on some miserable tub (what ship isn't if you've got the New Year's mid?) decided to vent his frustration by writing the log in rhyme and adding a few comments of his own.*

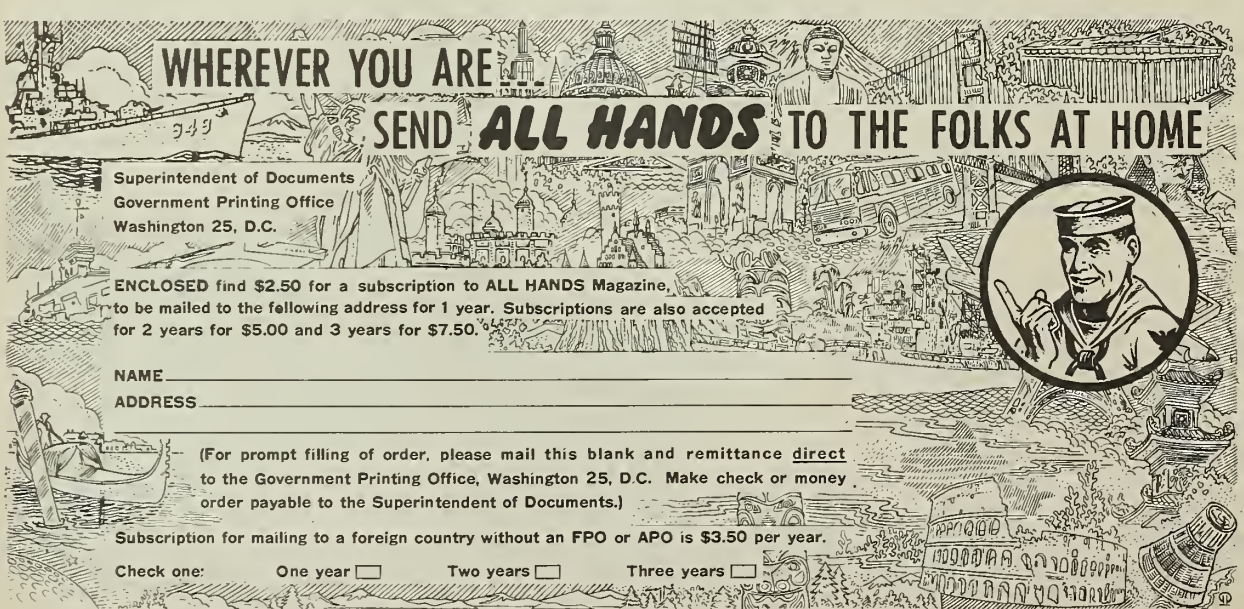
But when? Where? We wish we knew.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Nevada* (BB 36)—The 11th annual reunion is scheduled for 24 October at the El Cortez Hotel, San Diego, Calif. For further information, write to Arlington Smith, 7594 Careybrook Lane, San Diego, Calif. 92114.

• *Great White Fleet*—The annual reunion for those who cruised with the Great White Fleet will be held at the U. S. Grant Hotel, San Diego, Calif., on 16 December. For details, write to Harry S. Morris, 5070 Marlborough Dr., San Diego 16, Calif.



Colonial 'Pentagon' Is Site of Army-Navy Museum

CARPENTERS' COURT, as history buffs are aware, is a small section in the quiet Independence National Historical Park in Philadelphia. Quiet today, perhaps (except for the shuffling-through of myriad tourists), but in the 1774-1800 period the court was the Pentagon of our fledgling nation.

The Revolutionary War Navy was formed here by the Continental Congress meeting in Carpenters' Hall. Arms were stored in the hall, and soldiers drilled in the courtyard.

After the war, Secretary of War Henry Knox had his offices in Carpenters' Hall. His "Pentagon" staff then consisted of five clerks and a doorman. The Navy Department, under its first secretary—Benjamin Stoddert—occupied two rooms in a nearby house.

This is, then, an ideal location to memorialize the birth of the Navy and its subsequent significant role in America's history. This is exactly what is to be done, for this is where an Army-Navy Museum is to be built.

For several years the Navy has been interested in the establishment of a Navy museum, and has given support to a proposal, made by friends of the Navy, to do this.

The Army developed a similar interest in a museum of its own, and it was subsequently agreed that a joint Army-Navy museum would be built.

For this project the Pemberton House, which sat in a corner of Carpenters' Court from 1775 until the house was demolished in 1812, is to be reconstructed. The house will add one more stroke of authenticity to the court area, which the National Park Service is recreating.

OVER 12 YEARS of research on other similar historical buildings in the area will help the planners achieve this authenticity.

In the Army-Navy Museum, panoramic and dioramic "living" displays and exhibits will dramatize the birth of the Navy, its role in the War for Independence, and the birth and growth of the regular Navy in the 1798-1800 period. The daring exploits of John Barry, Nicholas Biddle and John Paul Jones will be dramatically portrayed.

Cost of the Army-Navy Museum is estimated at about $600,000, which will pay for reconstructing Pemberton House and installing the military and naval displays. The Army's share is nearly paid, and the Secretary of the Navy has requested ADM James L. Holloway, Jr., USN, (Ret.) to head a national committee for fund-raising on behalf of friends of the Navy.



PAST—First *Ranger* battles HMS *Drake* at sea during the Revolution.



PRESENT—*USS Ranger* (CVA 61) was one of the first to contribute over $1000 to the Army-Navy Museum.

In this case, there is an added dividend for donors. Besides helping build the museum, they can be represented within the building as Builders, Benefactors, Founders or Sponsors, depending on the size of the gift.

Two Navy ships have already become Founders by contributing at least $1000. Both ships—USS *Enterprise* (CVAN 65) and USS *Ranger* (CVA 61)—bear names distinguished in the Revolutionary War.

The first of the long line of ships named *Enterprise* served valiantly in the Battle of Lake Champlain. This delayed the British advance from Canada for a year, gave the colonies time to prepare, and led to the decisive victory at Saratoga that helped bring France into the war. Her Navy and aid finally checked British seapower and made possible the victory at Yorktown.

USS *Ranger* carries on the name of John Paul Jones' frigate, which he daringly sailed into British waters to engage the enemy.

USS *Randolph* (CV 15) is also in line for similar recognition. The crew have forwarded a check which will serve to perpetuate the name and fame of the original *Randolph*, which CAPT Nicholas Biddle commanded during the winning of American independence.

As an added touch of recognition, the names of all donors—whether their contributions are incorporated in a group gift or made individually—will be listed in museum records.

Information on contributing to the Army-Navy Museum Fund is contained in OpNav Notice 5750 of 10 Jan 1964. Help is being invited from all quarters. Support of the project offers a special opportunity not only for ships bearing Revolutionary and post-Revolutionary War names, but for all ships and stations to perpetuate their names in an appropriate museum.

TO RETURN—Pemberton House (left) will be reconstructed to house the museum.



SERVICESCOPE

Brief news items about other branches of the armed services.

ABOUT 15,000 SOLDIERS are expected to try out the Army's air mobility concept this September when they stage a futuristic invasion of sections in North and South Carolina. The attack will be made by the 11th Air Assault Division (Test), which was created about 18 months ago especially to test the air mobility principle.

Most soldiers are carried to the front lines via ground vehicles. Troops from the 11th, however, go by helicopter. In a recent brigade operation 7500 soldiers were supported in combat by 400 helos—about one per 19 men. A number of fixed-wing transport and surveillance planes were also involved.

There are a number of advantages to the air mobility concept. Most obvious is speed. An army moving on the surface can seldom exceed 20 mph and may be impeded—even stopped—by obstacles such as mountains, mines, rivers and blown bridges. By contrast, helos travel well in excess of 60 mph and are independent of terrain.

The ability to strike the enemy at any point along the front is another advantage of helo-borne troops. Previously, enemy forces could assess the terrain and decide at what point they would be attacked. These positions could then be heavily defended.

Army strategists long ago realized that a mobile force could easily defeat a larger but more stationary one. If the September tests prove the new concept feasible, the mobility may be achieved by helicopters.

★ ★ ★

BEGINNING NEXT SPRING, freight shipped from the Military Air Transport Service (MATS) terminal at Travis Air Force Base, Calif., will fly in C-141 *Starlifters*.

The *Starlifters* can carry up to 63,000 pounds of cargo nonstop across the Atlantic or from the Pacific coast to Hawaii. In terms of men rather than material, the load would be 154 combat troops.

The *Starlifters* are the first pure jet cargo planes capable of being loaded directly through the tail at truck-bed height.

This means the giant planes can carry trucks, medium-sized missiles and many other items too bulky to be loaded through a side door.



BROAD SLIDE—The 212-foot-long mid-section of Army's barge-mounted nuclear power plant is launched sideways.



ON TOUR—USAF Academy cadets visit engine room of *USS Hornet* (CVS 12) as 261 take orientation cruise.

The *Starlifter's* broad wing allows it to use shorter runways than other planes of its type. It can airdrop troops or cargo and also be converted into a flying hospital ward to carry patients.

This fall, a C-141 squadron will be located at the MATS Flight and Crew Training Center at Tinker AFB near Oklahoma City to provide a fountainhead for trained MATS aircrews and instructors.

At Travis AFB, a squadron of 16 *Starlifters* will replace four-year-old C-135 *Stratolifter* jets which were not designed for continued heavy cargo work.

A C-141 squadron will be activated at Dover AFB, Del., in the late summer of 1965 and another at Hunter AFB, near Savannah, Ga., the following winter.

At both bases, the new jets will replace 15-year-old propeller-driven C-124 *Globemasters* which will be transferred to the Reserves.

★ ★ ★

MORE THAN 700 cadets from the U.S. Air Force Academy cruised in 11 First Fleet ships during the 1964 Falcon Cruise. The cadets were embarked in three aircraft carriers and eight destroyers for five days of training at sea.

The future Air Force officers (Class of '67) saw shipboard operations first-hand. They stood watches on the bridge and in the Combat Information Center while underway. They also took short flights in naval aircraft and observed replenishment-at-sea operations.

The Falcon Cruises are part of a summer field trip which the Air Force Academy conducts annually so that cadets may become familiar with major operational commands of the Department of Defense.

★ ★ ★

A NEW COMPACT survival kit which is divided into two one-pound packages for carrying ease has been developed by the Army. It will provide basic medical and survival equipment for the field soldier who has become separated from his unit.

The first container, called the operational kit, contains a signal mirror, flexible saw, flare gun with two white flares, gauze, adhesive plaster, absorbent bandages and

bouillon cubes. It also contains selected medical items, such as water purification, salt and anti-diarrhea tablets; a solution to treat cuts, scratches and mosquito bites; and antibiotic tablets and ointments.

The second kit, which is designed as a backup for the first, contains fishing lines and hooks; a sewing kit with magnetized needles to point north; anti-malaria tablets; headache capsules and a fire starter. It also contains the same items as are contained in the first kit.

Both containers are incased in polyethylene plastic and can be resealed with a waterproof pressure-sensitive tape after use. They are both enclosed in nylon bags which can be carried on a man's belt or pack rigging.

★ ★ ★

AN AIR FORCE research project called Cold Case has revealed that the full pressure suit—man's protector while flying at high altitudes—does not provide sufficient protection against the elements in an arctic climate. Men subjected to cold in arctic experiments could not endure the frigid weather in pressure suits without additional survival clothing.

The purpose of the tests was to determine tolerance times for pressure-suited subjects, and techniques for survival in sub-zero temperatures. Data collected during the past two winters showed the need for protecting the feet and hands, and for obtaining shelter in a dry cold environment.

Experiments were conducted in the field with six subjects wearing pressure suits and no survival equipment. In temperatures of 16 degrees below zero, five of the six men reached tolerance limits (skin temperature of 35 degrees) within 15 hours. The five men were forced to end the study within seven to 14 and a half hours. In all cases, cold extremities were to blame.

The sixth man—a survival school instructor—remained in the field for 48 hours, but only because he maintained a continuous fire.

During another series of tests, the subjects wore survival equipment as well as pressure garments. None of the men reached tolerance limits during the 48-hour period in the field. Several men removed the pressure suit and were comfortable in only survival clothing.



TROOPS see model of Tube-launched, Optically-tracked, Wire-command link guided missile system known as Tow.

The studies revealed that shelter and fire are essential. Flyers forced down in the arctic should remove the pressure suit and put on survival clothing if it is available. A snow shelter must be built promptly—even at night. The shelter may be snow piled on top of sticks and a parachute cloth, or a snow house hollowed out of packed snow.

The tests showed a high perspiration rate during mild exercise in the pressure suit, indicating that the garment should be partially opened while the subject is building a shelter or engaged in other labor.

★ ★ ★

THE AIR FORCE has developed a coating which will prevent graphite from deteriorating on contact with air.

Graphite is an excellent aerospace material because of its light weight and its strength at high temperatures. However, when subjected to the same temperatures while in the atmosphere, it oxidizes rapidly.

The new coating (zirconium oxide) seals off the air and consequently eliminates the deterioration of the graphite. Zirconium oxide can withstand temperatures higher than 3000 degrees Fahrenheit.

SPEEDY ONE—This is U. S. Air Force's YF12A jet aircraft, capable of attaining speeds in upper supersonic range.



MEN OF THE FLEET
SPEAK OUT ON LEADERSHIP





NAVY PETTY OFFICERS, particularly chief petty officers, have often been described as the backbone of the sea service. The factor that makes them so, in addition to their know-how, is their ability to handle men.

Another term for this particular ability is "leadership," a necessary characteristic for the PO moving up the ladder.

In the technological Navy, petty officers are more and more important as leaders each year. Having this quality means a lot to the Navy, and it can mean a great deal to the individual Navyman himself. Today, there is no better way for the young PO to advance himself than through his understanding of leadership.

Because leadership is a relatively intangible subject, there are no hard and fast rules for becoming proficient. However, a few guidelines may be found in the leadership practices of those who have mastered its complications. These men often disagree on minor points, but their different methods usually have common underlying principles which can be used to good advantage by the conscientious petty officer.

The following comments on this subject come from the experts—the POs themselves. Here are the considered opinions of a number of leadership school graduates, concerning the arts (or skills) which they believe to be prerequisites to good leadership. They come from ships throughout the Fleet and from duty stations all over the world:

• **THE LEADER,** whether officer or enlisted, must continuously evaluate *himself*. Good leadership stems from continuing self-evaluation.

The example set by the division officer will reflect both upon the petty officer and the men in his division. This is also true of the example set by the leading petty officer.

The leading PO should remember to take a few moments to think *before* he acts or assigns a particular task to an individual or group. When he has gained the confidence and trust of the men under him, he is recognized by them as their leader. He should never be too busy to discuss personal problems or matters concerning them.

His behavior and language in front of his men will be reflected in their actions. An effective PO never ridicules in public; he uses simple, direct terms and language with his men, and he realizes that he plays a role in guiding the development of their attitudes and habits.











The men must be made to feel that they are needed in the Navy, that they are a part of the Navy. Above all, they must be made to feel in their own hearts the great pride of being members of the Navy.

Being human, we are all going to make mistakes now and then. However, the mistakes can be minimized. Experience and knowledge help to minimize mistakes. A leader is not born—leadership is acquired through study and experience.

An effective PO will gain the confidence of his men. When he is effective, his subordinates will be willing to accept responsibility for their work and do it in an efficient manner. That's the goal we are all striving for.—**Walter C. Marsch, GMCS, *USN, USS Comstock* (LSD 19)**

• **AS A LEADER,** you should show an interest in your men. Discover their likes, dislikes and background, then assign their duties accordingly. Help them as much as you can. If there are questions you are unable to answer, admit it and then help them to find the correct answer. Don't lose your temper or become angry with men who ask questions. They are trying to further their knowledge.

Try to foresee problems and try to clear them up before they become too big. Be sincere with your men. Use good judgment and be tactful. Criticism must be clear, yet constructive and must not cause discouragement.

Give recognition and credit to your men when it is due. Don't seek your own advancement at the expense of others. Be concerned for the welfare and safety of your men. Do not exceed your authority. Be an example for your men to follow. **—Robert E. Smith, GMG2, *USN, USS Mataco* (ATF 86)**



• **TODAY THE NAVY** is stressing more and more the qualities and importance of good leadership. We find it necessary to have a much broader understanding of the men under us, what they want of the Navy, what their goals may be. Many of those coming into the Navy today have just completed high school, and some have not graduated. Many of them have, as yet, no specific goal or ambition.

We, as petty officers, have a big responsibility to these men.

Aside from the technical aspects of their individual ratings, they need guidance in their everyday lives. We can help provide this, if we are well-versed on the qualities of a good







leader and apply them as we go about our jobs.—**Thomas J. Glover, RM1, *USN, USS Galveston* (CLG 3).**

WHAT ARE THE SKILLS which make one man a better leader than another? Leadership is a combination of traits developed through the years. We learn by observing good leaders —not by copying, but by having an open mind and the ability to think for oneself.

The following traits, in my opinion, are a must for every good leader:

(1) *Expressiveness*—the ability to convey assignments and requirements clearly and concisely.

(2) *Understanding*—of the people you work with, those above and below you.

(3) *Initiative*—a willingness to get things started without waiting for someone else.

(4) *Persistence* — determination against job hazards, the ability to get the job done through hard work and patience.

(5) *Knowledge*—of yourself, your strength, your men, your job, your area, equipment, tools and procedures.

(6) *Honesty*—in every action, to inspire in your men their confidence in you as a petty officer.

(7) *Resourcefulness*—the ability to overcome obstacles by improving yourself and going ahead to accomplish the job to be done.

(8) *Enthusiasm*—an attitude of vigorous active interest in your job.

These are but a few of the many requirements for leading your men, but before a man can become an expert, he needs the experience of serving under good leaders.—**Dan A. Bullers, QM2, USN, Pacific Reserve Fleet.**

• **LEADERSHIP** requires a knowledge of the job to be done. Men cannot follow someone who doesn't know where he is going. On the other hand, men will be more willing to work when *you* can show them how to get the job done well and quickly. —**Eugene F. Silkowski, ET2, *USN, USS England* (DLG 22).**

• **TO ESTABLISH** a feeling of obedience in his men, a good leader must first set a good example himself by obeying orders given to him by his superiors. He must be enthusiastic about his work, and proud of his responsibilities. He must be dedicated, a man of honesty and integrity. He must command respect not only from his subordinates, but from his superiors as well.

A leader must always exercise care when making a decision and must accept responsibility for that decision. A good leader will welcome suggestions from his subordinates because this will make them feel part of the group and involved in its assigned tasks.

If a leader is to expect loyalty from his men, he must have a deep sense of loyalty himself, both to his men and to his superiors. A leader must be understanding when dealing with his men, and help them to know and solve their problems—both professional and personal. —**Thomas K. Hawkins, YN2, *USN, ComTraPac* Staff.**

• **IF MORE PETTY OFFICERS** and officers would teach by example, the mission of the United States Navy would be more completely fulfilled —and the followers would have a great deal more respect for everyone who wears the crow.

Seeing is Believing

Speaking of leadership, Yeoman First Class Charles K. Orth, of NAVCRUITSTA, Portland, Maine, forwarded to ALL HANDS this bit of verse. Its author is unknown, he says, but to him this is a real working tool of leadership.

The eye's a better pupil and more willing than the ear;
Fine counsel is confusing, but example's always clear.
And the best of all the preachers are the men who live their creeds,
For to see good work in action is what everybody needs.
The lectures you deliver may be very wise and true,
But I'd rather get my lesson by observing what you do.
I may misunderstand you and the high advice you give,
But there's no misunderstanding how you act and how you live.

I believe that the most effective way to lead is by example. If the petty officer casts a clear shadow of moral courage, dignity, respect and sound naval knowledge, he's a leader. Teaching and leading, by example, is the best way to help maintain the Navy's highest level of readiness. —**E. R. Bendtschneider, SK3, *USN, USS Cavalier* (APA 37).**

• **A GOOD LEADER MUST** set a good example at all times. He must be respectful, loyal, enthusiastic and obedient to his superiors. This in itself sets the first good example.

His personal conduct should be above reproach, in private as well as in public. He must be competent in his particular job and able either by direct knowledge or by reference books, to answer any question put to him.

A good leader has to be impartial and weigh both sides of any situation; he should not permit his emotions to bias his opinions and decisions. He should be alert and attentive, and keep up to date on matters concerning military and world affairs.

The leader should always be courteous. To expect courtesy, you must first be courteous to others. —**Clarence E. Johns, SH3, *USN, USS Mars* (AFS 1).**

• **TWO BASIC QUALITIES** of leadership are motivation and insight. Motivation is the key to learning and insight is the key to its use. Without motivation there will be no knowledge, and without insight knowledge is useless.

Through motivation comes knowledge, and that knowledge—applied with insight—leads to the development of leadership traits. With continuing motivation and insight, and through growing knowledge and application, the traits grow and strengthen.

So, also, does the leader and his leadership. And in turn, he wins the confidence, respect, obedience, and loyalty of those who follow him. —**James R. Duffy, ETNSN, *USN, USS Pine Island* (AV 12).**

• **FIRST, A LEADER** must have faith in his own beliefs. He must be a man of certain education, having

both knowledge of the job and the knowledge of people. He must be tactful and have a sense of personal satisfaction in seeing a job well done.

He must have a strong sense of right and wrong, and abide by these rules. Last—and most important—he must have integrity. This I define as an uncompromising adherence to a code of morals, or values, sincerity, honesty and candor, and avoidance of deception, expediency, artificiality or shallowness. **—Thomas E. Robertson, RD3, *USN, USS Ticonderoga* (CVA 14).**

• **UPON BEING PROMOTED** to third class, I found myself in situations which had previously been foreign to me. It was necessary for me to understand other men's problems and their personal backgrounds, and to issue work assignments. I didn't realize it at the time, but leadership was required.

Only through experience did I learn how to lead people effectively. Many men—both directly and indirectly—were affected by the quality of leadership that I practiced every day. I realized that a man's career could be ruined through the actions of an irresponsible leader. Flying off the handle, giving a bad order or placing a man on report in a moment of anger causes distrust among the men. The leader's authority must be used with discretion.

An effective leader must know where he is weak and develop traits to improve himself. Among these traits are patience, adaptability, attitude and understanding.

Leadership is necessary for a progressive, organized way of life as we know it in the Navy. Leadership is to the Navy what the brain is to the human body. Good leadership is passed on to, absorbed and applied by subordinates. This is done only if the petty officer is constantly motivated, learns his job thoroughly, exhibits self-confidence in himself and his job, and sets an example for others to follow. Motivation enables a person to constantly and aggressively practice and teach all forms of leadership.

In order that good leadership may be of value to our men, it must be practiced—by us—every day, hour and minute. The quality of leadership must be kept at a high level and passed on to other men to practice constantly. The lack of good leadership could make or break our country in time of war. It could very well be the deciding factor of our existence. **—Kenneth R. Mielke, GMT1, *USN, USS Ticonderoga* (CVA 14).**

• **A LEADER MUST** have qualities that will set a pattern for his men to follow. He must be a person to whom his men look with pride. He must give them confidence that, whatever comes up, he will make the right decision at the right time.

A good leader is honest and fair. He has to prove these qualities to expect the same from those under him. His loyalty to his men must be without question. A good leader will always consider his men's problems. When this happens, he will stand first with his subordinates. There will be no task too large or small for them to tackle with gusto.

Loyalty works both ways—loyalty to our seniors and their loyalty to us. Loyalty is a trust which must not be broken. **—Walter J. Brigham, SK1, *USN, USS Wright* (CC 2).**

READING COUNTERCLOCKWISE from the upper left hand corner the Navymen whose ideas are expressed in the Leadership article are: (1) Walter C. Marsh, GMCS, USS Comstock (LSD 19); (2) Robert E. Smith, GMG2, USS Mataco (ATF 86); (3) Thomas J. Glover, RM1, USS Galveston (CLG 3); (4) Dan A. Bullers, QM2, Pacific Reserve Fleet; (5) Eugene F. Silkowski, ET2, USS England (DGL 22); (6) Thomas K. Hawkins, YN2, COMTRAPAC Staff; (7) E. P. Bendtschneider, SK3, USS Cavalier (APA 37); (8) Clarence E. Johns, SH3, USS Mars (AFS 1); (9) James R. Duffy, ETNSN, USS Pine Island (AV 12); (10) Thomas E. Robertson, RD3, USS Ticonderoga (CVA 14); (11) Kenneth R. Mielke, GMT1, USS Ticonderoga; (12) Robert G. Busey, IC1, NRED 13-26, Pendleton, Ore.; and (13) L. W. Ross, FTG3, USS Ticonderoga.

• **IN ORDER TO BE** a good leader, a petty officer should be able to win the confidence of his men. He should be able to motivate them toward self-improvement and encourage them to do their jobs to the best of their ability with a minimum of trouble and confusion.

When he knows he is right, he should stick to a decision once he has made it. He should make every effort to know and understand his men's likes, dislikes and abilities. He should try to understand and help solve his men's problems.

He must know his own job and the duties of the men under him. He must keep up on the latest developments in his rate and be able to instruct and help his men when needed.

A leader must delegate authority to his subordinates, in order to help them become leaders too. He must be impartial and fair when assigning work. **—Robert G. Busey, IC1, USNR, Pendleton, Ore.**

• **EFFECTIVE LEADERSHIP** improves the quality of the work carried on by any given group. A resourceful leader helps the members fit into the group by seeing that, whenever possible, the individual is given the chance to do the work he knows best and that the right combinations of people work together.

In every case of faulty leadership, there is retarded progress. **—L. W. Ross, FTG 3, *USS Ticonderoga* (CVA 14).**

The opposite is also true.

The foregoing comments were made by Navymen graduating from the Petty Officer Leadership School, Fleet Training Center, San Diego. At the end of their course they were invited to make a brief report on the subject in their own words. The best ones appeared in the Naval Station newspaper, "Shore Leaf," after being judged by the BuPers Leadership Field Team, San Diego.

From these excerpts adapted for ALL HANDS, as a representative sampling of men from the Fleet, you will find certain points being made over and over again. If anything has been left out, let us know about it. We'll be waiting to hear from you.





SHOOT THE WORKS—Pitmen place spotters in target and riflemen fire on 600-yd. range during All-Navy matches.

Ready, Aim, Roll

ALL-NAVY CHAMPIONS in bowling and rifle and pistol shooting have been decided for 1964, and the Wild West can claim impressive victories in all departments.

The WestPac men's team and PacCoast women's team captured bowling championships. All men's individual champs came from the western side of the country (and world), but the women managed to grapple the lion's share of individual honors to save face for easterners.

The results in All-Navy bowling are listed below.

Team Standings—Men (24 games)

TEAM	POINTS	TOTAL PINS
WestPac	19	23,212
NorLant	17	22,875
PacCoast	15	23,265
SoLant	11	22,472
LantFlt	10	22,491

Team Standings—Women (18 games)

TEAM	POINTS	TOTAL PINS
PacCoast	17	15,477
NorLant	16½	15,394
SoLant	12½	15,140
WestPac	2	14,108

SHOOTING RESULTS were not quite so lopsided.

Nearly 200 rifle and pistol experts from U. S. and overseas bases competed in the Atlantic Fleet rifle and pistol matches at Annapolis, Md. After the smoke had cleared, the top two teams in rifle and pistol, plus the high 12 individuals not on the teams selected, found themselves headed for the All-Navy matches at San Diego.

J. J. Witherell, PR1, clinched the Secretary of the Navy pistol award, scoring 560 out of a possible 600 total points. Others scored high too.

LTJG N. J. Mendenhall won the Secretary of the Navy rifle award, scoring 580 of a possible 600 points. In the Navy Expert Qualification course LTJG Mendenhall fired a perfect score of 250 x 250 to become the second individual in Navy shooting history to do so.

D. L. Hamilton, ADR1, took top honors as winner of the combination rifle-pistol aggregate, scoring 1142 out of a possible 1200 points.

The rifle team representing Fifth Naval District won possession of the Atlantic Fleet rifle championship trophy, with a total score of 1441-108V. Second place honors went to the Third Naval District Reserve team, which scored 1436-103V points.

In pistol competition, First Naval District took first place with a score





CHAMPIONS—All-Navy men's team championship was won by WestPac. Top ladies team hailed from PacCoast.

Navy's Top Bowlers

Individual Champions—Men

TOTAL PINFALL:

1st
Hal Jahnsan, ADJC (PacCaast) 4823

2nd
Ralph Steele, YN3 (WestPac) 4803

3rd
Jack Sierens, ACCA (PacCaast) 4757

High Game:
Jack Sierens, ACCA (PacCaast) 267

High Series:
Hal Jahnsan, ADJC (PacCaast) 711

Individual Champions—Women

1st
Liz Fay, DT2 (NarLant) 3210

2nd
Ruth Jewett, YN3 (PacCaast) 3189

3rd
Ja Watts, SK3 (PacCaast) }
Arlene Narmingtan, HM1 (SaLant) } 3188

HIGH GAME:
LT Charlene Waadard (SaLant) 238

HIGH SERIES:
Liz Fay, DT2 (NarLant) 624

of 1091-25X, with second place going to Ninth Naval District, which scored 1083-20X.

Meanwhile, out in San Diego, an 11th Naval District pistol team set a new Navy record in service pistol competition. The four-man team, shooting .45 cal automatic pistols, scored an aggregate tally of 1121-29X. Last year's winning quartet scored 1095-25X.

Individual pistol honors in PacFlt competition went to T. L. Keigley, HM1, who scored high with 570-10X, followed by H. B. Bowlin, Jr., SFC, with 556-14X; LTJG F. C. Ferber, 556-11X; and A. G. Dean, RMC, with 555-12X. PacFlt rifle results were not received.

Next step, of course, was All-Navy. In the Southern California sunshine the COMMINE pistol team members found their trigger fingers in top working order. The four-man squad outplaced other shooters with a combined 1091-27X aggregate to win pistol team honors. Runner-up was the First Naval District team entry, which scored 1087-21X.

A total of 109 men competed for the All-Navy individual pistol championship. Only one could win, and G. D. Carapellotti, AQCS, decided he wanted to be that one. He shot 579-20X to help him realize this desire. Following him as a close second was J. L. Galvao, GMGC, with 577-22X; with third, fourth and fifth places going to D. E. My-

Men's Averages (24 games)

Hal Jahnsan, ADJC	PacCaast	201
Ralph Steele, YN3	WestPac	200
Jack Sierens, ACCA	PacCaast	198
Daren Summervald, PN1	NarLant	197
Albie Butts, DMC	WestPac	196
Mitchell Muskan, HN	LantFlt	195
Skip Garman, YN2	SaLant	193
Carl Willman, LTJG	WestPac	193
Danald Taureen, FTC	"	192
Jim Schafer, EMCS	NarLant	192
Russ Olin, ADR1	PacCaast	192
Gene Suttan, MA3	LantFlt	192
Jim Welka, ETN2	NarLant	191
Alex Fuller, LCDR	PacCaast	191
Haward Strunk, AMHC	SaLant	190
Narman Nichalsan, SOCM	LantFlt	190
John Ragsdale, YNCS	SaLant	189
Bill Pettigrew, AGC	NarLant	187
Tany Rabina, LT	PacCaast	186
Larry Mitchell, AN	WestPac	184
Jack Jacabsan, CT1	NarLant	184
Larry LeVeque, YN3	SaLant	182
Rabert Haberly, PT1	LantFlt	181
Bab Myers, ADR2	SaLant	180
Gary Kelven, AMH3	LantFlt	177

Women's Averages (18 games)

Liz Fay, DT2	NarLant	178
Ja Watts, SK3	PacCaast	177
Ruth Jewett, YN3	"	177
Arlene Narmingtan, HM1	SaLant	177
Charlene Waadard, LT	"	176
Mary Garrett, HN	PacCaast	174
Laura Care, DK2	NarLant	173
Debbie DeBevec, CTCA	"	173
Dattie Thampsan, YN2	SaLant	170
Pat Matthews, TE/RM1	PacCaast	168
Dattie Effner, LT	NarLant	168
Emily Stith, SN	PacCaast	163
Pat Pleabeau, PN3	WestPac	162
Janet Lachenauer, YNSN	NarLant	161
Virginia Winkler, DK2	SaLant	159
Jackie Gacker, SN	WestPac	158
Betty Ward, HMCA	"	158
Lynn Elliatt, LCPL	SaLant	157
Betty Harraw, PN3	WestPac	155
Pat Eichman, SN	"	145



LONG BARRELS—VADM E. P. Holmes, presents CNO Combat Rifle trophy to R. N. Turnipseed, SHC, for PacFleet. *Below:* All-Navy rifle team trophy is presented J. C. Ketzler, GMC.



TOP GUN—All-Navy pistol champion for 1964 is G. D. Carapellotti, AQCS.



PISTOLEERS—All-Navy champs from Ninth Naval District pose with their 45s.



rick, HMC (574-18X); LT J. T. Carroll (568-12X); and T. L. Keigley, HM1, (566-15X).

Going into the All-Navy rifle competition, western entries were again prepared to dominate the goings-on. The CNAVANTRA squad from Texas won the rifle team title, establishing a new record in All-Navy rifle competition. Spearheaded by Al Sasules, ADJ2, and J. L. Laukaitis, TD3, the squad fired 1444-99V to top Fifth Naval District by 22 points and give Corpus Christi the title. The CNO Combat Rifle Team Trophy (Burke's Bonnet) was won by the Pacific Fleet.

The individual All-Navy rifle title was also copped by Sasules, who fired 581-31V, with second place going to Laukaitis with 580-31V. A tie for third and fourth places went to W. D. Martin, DCC (579-34V); R. L. Brown, AM1, (579-34V); and Thomas Treinen, AN (578-39V).

Joe Galvao came through in the finish to be named top rifle-pistol aggregate winner of the U. S. Navy. Going into the final day of competition, Galvao was second, behind G. D. Carapellotti, Small Arms Marksmanship Instructor assigned to the staff of the Commandant, First Naval District. —Bill Howard, JO1, USN.

Randolph Sculpins Make Splash

Skindiving is a popular sport in many sections of the U. S., and enthusiasts usually gain more enjoyment from their sport by joining a club. One advantage skindivers in the Sculpins Club have over most skindivers is that their club headquarters is constantly on the move, allowing them to explore waters in many areas.

The Sculpins Club is made up of crewmembers of uss *Randolph* (CVS 15), where interest in skindiving began to grow about two years ago. Because of the dangers involved if proper equipment and procedures are not used, the ship's diving officer organized the Sculpins Club to teach divers underwater safety.

Of the present total of 36, four Sculpins are Navy-trained divers who went through the explosive ordnance disposal program (EOD). These four men are club officers, responsible for training other club members.

The present club safety program includes lectures on how to avoid such underwater dangers as bends, nitrogen narcosis and air embolism. Club officers also teach underwater physics dealing with gases and pressure, and facts about underwater hazards such as fire coral and dangerous plants and fish.

To join, a man must pass an initial swimming test and donate five dollars toward the operation of the club, including upkeep of the 12 sets of scuba gear.

Once initiated, club members find the sport doubly enjoyable while operating from a moving base.



ON THE JOB—John E. Cater, BMC, a Navy recruiter in Alaska, gives facts to potential Wave enlistee.

Sleet Job for Chief

The Navy Recruiter for Alaska knows his way around his area—all 586,400 square miles of it.

John E. Cater, BMC, tested or interviewed 82 men during one month early this year. Of those applying, 40 were accepted for enlistment. When you consider Chief Cater flies to the candidates' home towns (travel funds for potential enlistees are limited, so he must go to them for preliminary interviews), types all the pre-enlistment papers and manages the publicity and travel arrangements, Chief Cater is a busy man, indeed.

In addition, he finds time to teach Sunday School, be active in United Services Organization (USO) affairs and attend the University of Alaska courses at Elmendorf AFB.

Join the Club—If You Can

The gunnery performance of uss *Robert L. Wilson* (DD 847) has earned that destroyer the reputation for shooting as straight as perfection demands.

While undergoing refresher training at Guantanamo Bay following her FRAM I conversion, the DD fired 24 rounds of 5-inch ammo and hit the target 24 times. These circumstances might be of interest to destroyermen interested in challenging *Wilson*:

- *Wilson* was underway, churning along at 25 knots.
- The 24 rounds were fired in less than one minute.
- The target was five miles away.

The destroyer's crew now claims charter membership in their highly exclusive "24 for 24" Club.



UNDERSEAERS — Members of Sculpins Club, a skindiving group serving in USS *Randolph* (CVS 15), are engaged in their favorite sport.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

Sub Fleet Grows

Within a two-hour period this spring at Kittery, Maine, one submarine was commissioned, another's keel was laid and a third was launched.

The nuclear powered Fleet ballistic missile submarine USS *John Adams* (SSBN 620) was the ship commissioned. As with other FBM submarines, *Adams* has two crews—Blue and Gold.

Sixty-five minutes after the *Adams*' commissioning, the keel of the *Sturgeon*-class nuclear powered attack submarine *Grayling* (SSN 646) was laid. The first commanding officer of the first *Grayling* (now Rear Admiral Eliot Olsen, USN, Ret.) was present as honored guest. *Grayling* is scheduled for completion in 1966.

The nuclear powered Fleet ballistic missile submarine *Nathanael Greene* (SSBN 636) was launched 20 minutes later. The keel was laid 21 Apr 1962, and commissioning is scheduled for November.

Shipbuilding Roundup

Here is a roundup of Navy shipbuilding activity previously unreported by ALL HANDS.

The contracts for the three nuclear submarines listed below represent half of the fiscal year 1964 nuclear powered attack submarine allowance. Contracts for two had previously been let.

The combat store ship is the only such ship authorized in the FY 1964 Shipbuilding and Construction Program.

Contracts

• The three nuclear submarines for which contracts were let are in the *Sturgeon* class, they will be 292 feet long; have a 31-foot beam, and displace 4100 tons. They have been assigned hull numbers SSN 661, 663 and 664.

• A combat store ship 581 feet long with a 79-foot beam and a 16,050-ton displacement is being built. Her assigned hull number is AFS 3.

Names Assigned

• Names have been assigned to hull numbers SSN 649 (*Sunfish*), SSN 650 (*Pargo*), and SSN 653 (*Ray*). A name has also been assigned to SSBN 656—*George Washington Carver*—in honor of the Tuskegee Institute biology teacher who preached crop diversification to Alabama farmers.



TOPSIDE FIRING—*USS Henry Clay* (SSBN 625) launches *Polaris A-2* while surfaced in Atlantic. Objects in the air are launch adapters which detach themselves from missile once it leaves tube. The temporary mast is for telemetry.

Launchings

• *Greenling* (SSN 614) which is scheduled for commissioning in August 1965.

• *Brumby* (DE 1044), named for LT Thomas M. Brumby (1855-1889) and ADM Frank Brumby (1874-1950.) *Brumby* is designed and equipped primarily for ASW duty. She is 414 feet, six inches long, with a 44-foot beam and displacement of about 3400 tons. She is scheduled for commissioning in June 1965.

Commissionings

• Commissionings include the attack submarine USS *Dace* (SSN 607). *Dace* is 296 feet long, with a 32-foot beam and 4500-ton displacement. She is homeported at New London, Conn.

• USS *Daniel Boone* (SSBN 629) see page 41.

• USS *Tecumseh* (SSBN 628), named for the Shawnee Indian chief who was killed in the battle of the Thames in 1813. *Tecumseh's* home port is New London, Conn.

BUILDERS OF THE NAVY



Stephen Decatur received his training with Preble in the Mediterranean. The training paid off an one accasion, far example, when Decatur cammanded USS United States in an encaunter with the British ship Macedanian during the War of 1812. Decatur quickly realized his ship's greater range would enable him ta autshaot his appanent, and prevented the enemy from clasing. His gunners fired rapidly and accurately, and mare than a hundred shats penetrated Macedanian's hull. The battle was aver within two hours—a great victary for Decatur, wha had the ability ta infuse his spirit inta his men.

• The guided missile frigate USS *Richmond K. Turner* (DLG 20), named for the admiral who commanded Pacific Fleet amphibious forces during World War II. *Turner* is the fifth of the double-ender guided missile frigates, so called because they carry missile launchers fore and aft.

Available in Jumbo Size

The word may be new to lexicographers, but "jumboization" is the process of making something big bigger. At least, that's the name the Navy has given to the operation for enlarging fleet oilers.

When an oiler is jumboized, it is cut in halves and an extra midsection is added. The finished oiler can carry 50 per cent more fuel than in prejumboization days. As added features, the modified ships have improved living facilities as well as newer pumps and deck gear, designed to speed fuel transfer.

USS *Navasota* (AO 106), which will be the Navy's first jumbo oiler, will rejoin the Fleet in June after seven months in the yards. USS *Waccamaw* (AO 109) will be the second.

Next year, USS *Passumpsic* (AO 107), *Mispillion* (AO 105) and *Pawcatuck* (AO 18) will be jumboized.

Jumboization is a shipyard worker's jigsaw puzzle. First, the superstructure is removed and the ship is cut in halves. After an extra midsection is set in place the pieces are put back together.

New Ships Are Named

The Navy has selected names for a small fleet of new ships which are building in various parts of the country. Included in the recently released list are two oceanographic research ships (AGOR 9 and 10); two escorts (DE 1047 and 1049); one amphibious transport dock (LPD 9); one guided missile destroyer (DDG 23); and one guided missile frigate (DLG 32).

AGOR 9 and AGOR 10, both under construction at Marinette, Wis., have been assigned the names of *Silas Bent* and *Thomas Washington* respectively. They are 209 feet long, have a 1370-ton displacement, and are designed as floating laboratories for use in oceanographic research. *Bent* is named for LT Silas Bent, USN, who served as an oceanographer in the Navy until 1961 when he retired after 41 years' service. *Washington* is named for ADM Thomas Washington, USN, who served as Navy Hydrographer between 1914 and 1916.

The escort ships DE 1047 and DE 1049, both under construction at Bay City, Mich., have been assigned the names *Voge* and *Koelsch*, respectively. They are *Garcia* class, 414 feet long with a 44-foot beam, and displacing 3400 tons.

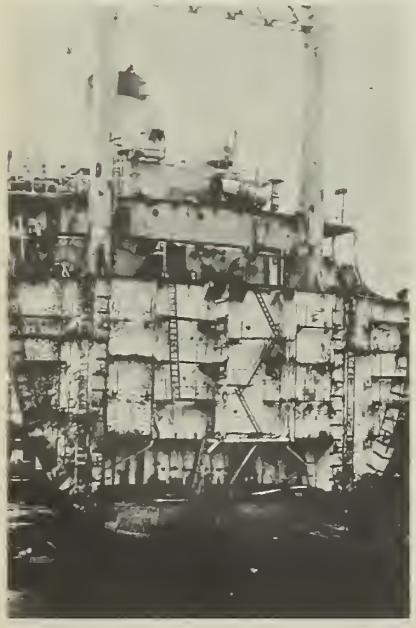
Voge is named after RADM Richard G. Voge, USN, a submariner who received the DSM for his services as operations and combat intelligence officer of the Pacific Fleet Submarine Force between 1942 and 1945. He died in 1948.

Koelsch is named for LTJG John Kevin Koelsch, USN, who died while a prisoner of war in Korea. He was a pilot of a helicopter which crashed on a rescue mission in North Korea in 1951. He led his men through enemy territory, successfully evading the enemy for nine days before their capture. He was awarded the Medal of Honor posthumously.

LPD 9, named *Denver*—after the city—is building in Seattle, Wash. *Denver* is 521 feet long with a full load displacement of 13,900 tons. She can carry six CH-37C amphibious transport helicopters and up to nine LCMs, with troops and equipment.

DDG 23, named *Richard E. Byrd* after the famed Arctic explorer is a *Charles F. Adams* class DDG building in Seattle. She is 437 feet long with a full load displacement of 4500 tons. *Byrd*, like her sister ships, will be armed with *Tartar* surface-to-air missiles, two 5-inch, 54 guns, *Asroc* and antisubmarine torpedoes.

The last of this group, DLG 32, has been named *William H. Standley*, after the late ADM William H. Standley. ADM Standley had retired in 1937 after serving 40 years, but was recalled to duty in 1941 and named the U. S. Navy representative to the Beaverbrook-Harriman Special War Supply Mission to the Soviet Union. President Roosevelt appointed him a member of the Roberts Commission in 1941 to investigate the circumstances of the Japanese attack on Pearl Harbor.





HALF BY HALF — Bow and stern sections of fleet oiler *USS Navasota* (AO 106) face same direction while undergoing 'jumboization' process.

In 1942 ADM Standley was appointed U. S. Ambassador to the USSR. He later also served with the Office of Strategic Affairs in the Navy Department until his final retirement in 1945. He died in 1963.

Standley is a *Belknap* class DLG, 547 feet long with a 55-foot beam and full load displacement of 7900 tons. She will carry *Terrier* missiles, *Asroc*, *Dash*, torpedoes, three guns, and be equipped with the Navy Tactical Data System (NTDS). She is building in Bath, Maine.

Three New Subs on the Ways

Pogy, *Aspro* and *Queenfish* will be the names of three nuclear powered submarines now under construction.

The names for the new subs were chosen to honor three World War II submarines which between them sank 29 enemy ships.

- *Pogy* (SSN 647) carries the name of SS 266, which was credited with sinking 15 surface ships and one submarine during World War II. The new *Pogy* had her keel laid at Camden, N. J., in May, and is scheduled to be launched next June.
- *Aspro* (SSN 648) is named in honor of the SS 309, which sank four surface ships and one submarine. *Aspro* is under construction at Pascagoula, Miss., and is scheduled for launching in January 1966.
- *Queenfish* (SSN 651) bears the name of the sub (SS 393) which sank eight surface ships. The new *Queenfish* is under construction at Newport News, Va., with her launching scheduled for September of 1965.

Wainwright Launched

The 8000-ton guided missile frigate *Wainwright* (DLG 28) has been launched in New England. It has been under construction since 2 Jul 1962.

The ship was named in honor of five Navy men in the Wainwright family: Commander Jonathan M. Wainwright (1821-1863), his son Ensign Jonathan M. Wainwright, Jr. (1849-1870), their cousin Commander Richard Wainwright (1817-1862), his son Rear Admiral Richard Wainwright (1849-1926) and grandson Commander Richard Wainwright (1881-1944).

Wainwright was also the name of two earlier destroyers, DD-62 and DD-419.

The new frigate is 547 feet long with a beam of 55 feet.



PASS THE AMMO—This is how crew of *USS Hancock* (CVA 19) sees *USS Rainier* (AE 5) as the carrier takes her station alongside for replenishment.

Boone Joins Missile Fleet

Another nuclear-powered submarine equipped with *Polaris* missiles has been placed in commission.

The new sub is uss *Daniel Boone* (SSBN 629), a *Lafayette* class ship which measures 425 feet in length, displaces about 7000 tons, and is armed with 2880-mile *Polaris* A-3 missiles.

The commissioning of *Daniel Boone* raised to 19 the number of fleet ballistic missile submarines now in full service. There are nine others which have been launched but not commissioned, and 13 still under construction.

Daniel Boone is longer and heavier than earlier SSBNs, having additional spaces not built into *George Washington* and *Ethan Allen* types, including an activities room.

The new submarine was built and commissioned at Mare Island, Calif. She is named after the 18th century frontiersman.

Daniel Boone rates the special attention because she is the first fleet ballistic missile submarine to become operational with the Pacific Fleet. She is based at Pearl Harbor.

She is built to accommodate 126 enlisted men and 14 officers. Amidships, she has 16 tubes for *Polaris A-2* or *A-3* missiles, and her bow has four torpedo tubes.

Her propulsion is provided by a steam turbine powered by a water-cooled nuclear reactor, and she always knows where she is through her SINS (ships inertial navigation system).

Like the original Daniel Boone, she is an expert in making her way through trackless areas. However, her weapons are considerably more formidable.

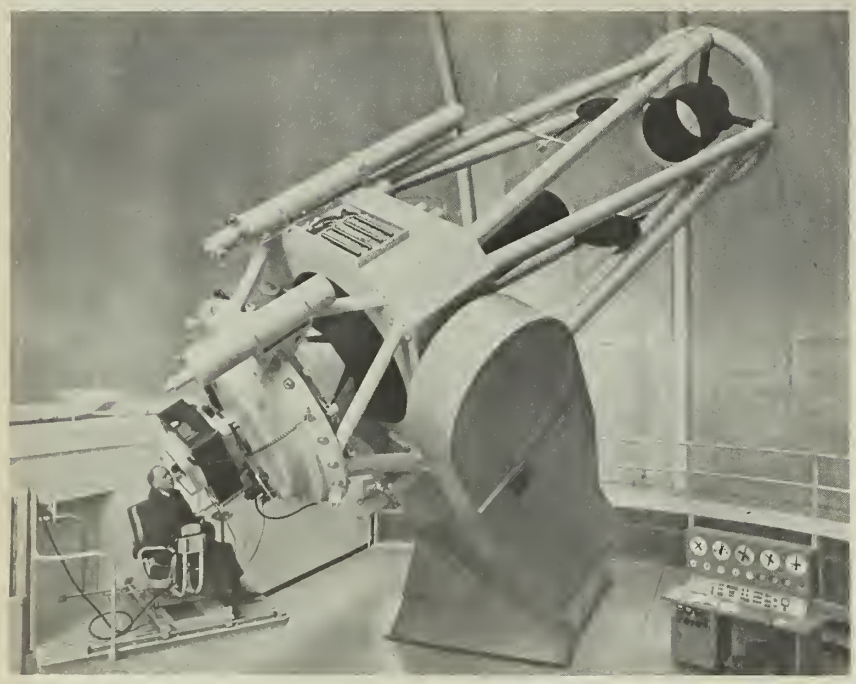
You're Under Pressure Here

In a fraction of a second the simulated altitude of the pressure chamber soars from 30,000 to 60,000 feet, filling the room with clouds of water vapor. The instructor's voice crackles through the intercom to the man seated in the chamber: "Admiral," he says, "without the pressure suit you're wearing—you'd be a goner!"

The man in the chamber is RADM

IN WETDOCK — The ASW support carrier *USS Yorktown* (CVS 10) is undergoing overhaul at Long Beach.





SUPER SNOOPER—This 61-inch reflecting telescope at U. S. Naval Observatory, Flagstaff, Arizona, will study stars 600 million-million miles away.

Jackson D. Arnold, Force Material Officer on the staff of COMNAVAIRPAC. The veteran naval aviator was completing full pressure suit training at NAS North Island's Aviation Physiology Training Unit as the 2000th trainee since that portion of the unit was established in 1956.

Such dramatic object lessons as "explosive decompression" are encountered by nearly 300 pilots a year who are fitted with and indoctrinated in the use of the full pressure suit (FPS).

Although the cockpits of the Navy's high altitude jet aircraft are pressurized, an emergency ejection or ruptured cockpit at extreme altitudes (as simulated in the pressure chamber) would be fatal without the pressure suit. Lacking pressurization at 63,000 feet, for instance, normal body temperature is sufficient to cause body fluids to boil. The boiling point of water at this altitude is 98.6 degrees.

Admiral Arnold's many responsibilities as Force Material Officer include the maintenance, repair, modification and technical readiness of NAVAIRPAC's aircraft and related materials. Taking this responsibility personally, he signed up for the concentrated two-day course at the Aviation Physiology Training Unit.

In the suit the admiral wore, he would probably have been comfortable on the moon. Except for the heat-reflecting silver coating, the FPS is the same as the space suit used by astronauts. Because of working experience with the FPS, APTU has acted in an advisory capactiy on NASA's *Mercury*, *Apollo* and *Gemini* projects, while also maintaining liaison with civilian space industries.

Lectures and checkouts received with the FPS are supplemented by actual experience in the suit. Fully suited, students operate various equipment and instruments they use in flight. An operational flight trainer, which simulates the cockpit of a jet aircraft, gives them an opportunity to "fly" in the suit. Pressure chamber runs to 70,000 feet simulate actual extreme pressure variations which may occur.

The FPS and training in it are designed for pilots' safety both in and out of aircraft. Because of the insulated, airtight construction of the suit and its self-contained oxygen supply, it serves as a safety device in another extreme enviroment—the ocean.

Should a pilot ditch at sea, the FPS would keep him afloat and insulate him from exposure to the elements. The suit could even sustain him to a depth of 180 feet underwater.

In addition to FPS training, APTU trains 3000 pilots a year in a one-day physiology course. This training, which has been carried on since the unit was started, is required of all Navy pilots once every two years.

This training, too, helps pilots to survive in a different environment. Students learn to adjust to night vision, spatial disorientation (loss of bearings), and to avoid such dangers as hypoxia (oxygen deficiency) and hyperventilation (excessive respiration). Low altitude runs in the pressure chamber again simulate actual conditions which pilots may encounter.

To conduct such technical training, personnel attached to the physiology unit must, in turn, be specially trained in the field of aviation medicine.

CDR Walter L. Goldenrath, MSC, USN, Officer in Charge of APTU, holds degrees in human physiology, medical physiology and biomedical instrumentation. He has specialized in aviation physiology, the FPS, and related equipment at Wright-Patterson AFB; the Navy's School of Aviation Medicine in Pensacola, Fla.; and at the Aerospace Crew Equipment Laboratory in Philadelphia.

His assistant, LTJG H. D. Brumfield, MSC, USN, has a degree in biology and has done graduate work in physiology and research in cardiac physiology. He is a certified applied aviation physiologist.

Enlisted technicians who operate

WELCOME ABOARD—VADM T. H. Moorer, Commander, Seventh Fleet, greets President of Republic of the Philippines, Diosdado Macapagal, as he arrives aboard the Seventh Fleet flagship *USS Providence* (CLG 6).



the unit also are required to have specialized training and experience. Hospitalmen (aviation physiology technicians) who conduct lectures and supervise physical training, and Tradevmen who operate and maintain training equipment, also attend the Navy's School of Aviation Medicine. Parachute riggers who fit the suits and adjust various related equipment in the training devices need extensive on-the-job training before tackling the FPS.

In all, safety is the prime factor. Aided by experience in training and practice with the FPS, work on research and development of a safer, more comfortable suit continues.

—Jerry Dunning, JO2 USN

De Soto County Goes Inland

Traveling 1200 miles inland earlier this summer, the landing ship tank *USS De Soto County* (LST 1171) is presently giving Great Lakes residents a look at the Navy-Marine Corps team.

When the visitors come aboard, they'll see a group of displays ranging from a full-scale model of a *Polaris* missile to a color movie of the Navy-Marine Corps team in action on a panoramic movie screen. The screen and films are the same as those at the Navy-Marine Corps exhibit at the New York World's Fair. Modern ground-combat weapons are also available for viewing.

De Soto County is stopping at 18 Great Lakes and St. Lawrence Seaway ports. She is the first Atlantic Fleet Amphibious Force ship to make an extensive cruise in the Great Lakes in recent years.

New Barracks for ASW Men

Navymen accustomed to dormitory style quarters may rub their eyes in disbelief when they see the new look in enlisted barracks at the U. S. Fleet Anti-Submarine Warfare School at San Diego, Calif.

The new four-story structure is built of reinforced concrete faced with blue glazed brick and glass. It accommodates nearly 600 enlisted men in rooms of two and four.

Another barracks is planned to be constructed on the ASW school grounds and work has already begun on a new training building which will include a 400-seat critique and lecture hall for ASW war games.

A fair portion of Navymen will have an opportunity to sample life in the new structures. The Fleet Anti-Submarine Warfare School graduated more than 12,000 officers and enlisted men during the last fiscal year.



'SHOWBOAT'—*USS De Soto County* (LST 1171) is currently visiting Great Lakes, Illinois, and St. Lawrence Seaway ports during inland sea cruise.

Just One Happy Family

The guided missile destroyer USS *Biddle* (DDG 5) will soon have the most cosmopolitan crew of any ship in the U. S. Navy when regular crewmen from the navies of West Germany, Greece, Italy, the Netherlands, Turkey and Great Britain come aboard.

This "mixed-manning" demonstration, as announced by the Secretary of Defense is being carried out for a probable period of 18 months with the approval of the President.

It will provide an opportunity to show how a crew of several nations can operate a modern naval vessel—a situation that would be commonplace if a proposed multilateral force should come into existence.

The six nations, plus the United States, are presently negotiating the possibility of establishing such a multilateral force (termed MLF), whereby crewmen from all countries involved would man a force of surface ships armed with *Polaris* missiles. The multilateral force, as presently envisioned, would operate generally under NATO and be owned by countries that contribute to its creation and maintenance.

Although the technical equipment on *Biddle* is not the same as that being considered for the MLF surface vessels, the ship is armed with *Tartar* missiles and *Asroc*, and will thus provide operational experience with complex weapons systems for these foreign navymen.

Biddle has a complement of 18 officers and 316 enlisted men. Two additional officers will be assigned during this demonstration, for a total of twenty. Present plans are that officers and men from the six European countries will gradually replace up to about half of the DDG's crew, with the first increment consisting of a group of British sailors who joined the ship in June.

Crewmen from the other nations will be assigned to the 4500-ton destroyer in the following six-month period, after undergoing language and technical training. English will be spoken aboard.

During this demonstration no single country, except the U. S., will contribute more than 20 per cent of the total crew. Germany with about 45 billets, will probably have the largest number of sailors from any of the European countries.

Biddle is attached to the Atlantic Fleet and under the command of CDR Thomas E. Fortson, USN. She will normally be based in Norfolk, Va., and will operate in the Atlantic area with the Second Fleet and in the Mediterranean with the Sixth Fleet. Possibly, at times, *Biddle* will



DOWN AND UP—*USS Irex* (SS 482), shown with officers and enlisted men lining her deck, has completed 9000 dives in 19 years' active naval service.

operate in company with units of fleets of other participating countries. Visits to ports in the other participating countries are scheduled for the ship.

Irex Hits 9000

There are stories about yeomen who don't like to type, aviators who don't like to fly and, of course, sailors who don't like to go to sea. If there is such a thing as a submariner who doesn't like to dive, he should employ all possible devices to avoid being assigned to duty aboard USS *Irex* (SS 482).

On the other hand, if you like to dive, this is the place for you. In the first 19 years of this sub's service to the Navy, *Irex* completed 9000 dives. This averages out to 1.29 dives per day, 365 days per year for 19 years.

On board for the occasion was a man who helped start *Irex* on the road to 9000. CDR S. T. Bussey, USN, Commander Submarine Division 81, was a member of the commissioning crew when *Irex* made her first dive in May 1945. He dropped in to perform diving officer duties for number 9000.

After the dive, the occasion was commemorated by a cake cutting (and eating) ceremony in the crew's mess.

It is not unfitting that *Irex* should mark this achievement, for she comes from a diving family. Three other subs in her class (*Tench*) completed their 10,000th dives in 1960.

Irex was authorized by Congress on 17 June 1940. She was launched on 7 Oct 1944 at Portsmouth Naval Shipyard, and was commissioned on 14 May 1945.

In February 1948 *Irex* was recipient of the first snorkel installation to be put on an operational submarine in the Navy.

The ship is presently assigned to Submarine Squadron Eight in New London, Conn., and was at sea for an operational readiness inspection when the 9000th dive took place. Her CO is LCDR Howard R. Portnoy, USN.

Gourmet Night, Navy Style

If you ask a Navy cook, "What is it?" you're likely to end up with ice cream on your pork and beans. But Wednesday nights, in the *USS Canberra* (CAG 2) wardroom, that's a legitimate question.



BOILERMAN Jimmy L. Sanford, BT1, USN, is awarded ComCarDiv 14 commendation for his quick action in securing steam fire pump which was overspeeding and out of control on board *USS Lake Champlain* (CVS 39).

Each Wednesday evening, on gourmet night, the wardroom menu features a foreign dinner. Quite understandably, some officers may have trouble recognizing the main course.

One Greek meal, served a few months ago, consisted of mousaka (meat pie), spanakopita (spinach and feta cheese pie) and aginares tiginetos (fried artichokes). On the other hand, those who were on familiar terms with Greek food may have had difficulties classifying sashlik, the main dish on Russian night.

Occasionally, the Wednesday night cuisine may be more familiar. Take, for instance, the California dinner a few months back: Abalone steaks, Caesar salad and pickled artichoke hearts.

Gourmet night is the brain child of mess caterer Lieutenant Commander C. I. Brown, who is also the ship's navigator. His accomplice, Chief Steward R. Nanquil, scours the stores in the ship's home port (Long Beach, Calif.) for the off-beat ingredients called for in the recipes.

Despite the pungent comments these two men almost certainly receive, *Canberra* officers enjoy the unfamiliar food. According to reports, few of them eat in the gedunk on gourmet night.

Strong but Helpful

Sixth Fleet ships USS *Springfield* (CLG7) and *Enterprise* (CVA N65) sailed into the Eastern Mediterranean recently bearing gifts and providing their crews with an opportunity to see Istanbul's fabled bazaars and mosques and relics of the Byzantine and Ottoman Empires.

The sailors also left some good deeds by which to be remembered. For instance, 20 enterprising sailors from the Big E brightened the rooms of the Mevlane Kapi Boys Rehabilitation Camp with coats of red, white, blue, yellow and grey enamel.

Nearly 200 Sixth Fleet sailors donated as many pints of blood to the Turkish Red Crescent Society and a Sixth Fleet pianist taped a half-hour program for a local radio station.

John W. Gill, EM3, risked his own life to save a woman who had fallen from a ferry boat into the icy waters of the Bosphorus.

About 3000 residents of Istanbul braved the bitter winds of early spring to visit *Enterprise*, and an en-

semble of Army bandsmen dressed in the 16th century costumes of Turkish janissaries gave a half-hour performance featuring traditional music played by brass and reed instruments and drums.

Springfield's gifts to Turkey were in the form of medical instruments which were the donations of medical groups in U. S. cities and towns named Springfield.

The recipient of the equipment in Turkey was the American Hospital of Istanbul, a private institution with a 75-bed capacity and a staff of 40 nurses.

Springfield also left contributions of medical materials at other ports of call in the Mediterranean, where she was participating in NATO exercises.

This Cat Makes the Scene

Hollywood, take note—there is a budding talent on USS *Canberra* (CAG 2), and its owner may bang at your gates someday soon.

Neal M. Elliston, PC3, has a proven ability in speech and dramatics. The latest evidence is a first place award he won in the 11th Naval District talent contest recently.

Elliston, who was an extra in the movie *PT 109*, presented a dramatic monologue, "Beyond the Last Mile," and was selected the top talent among 20 contestants.

He has been winning honors for his talent since he began four years of speech classes at Assumption High School in Denver, Colo. He was named the outstanding speech student of the Denver Parochial League in 1959-60; placed second in the Colorado state oratorical contest in 1960; and was awarded a degree of distinction by the National Forensic League.

Elliston says he turned down a scholarship to a dramatics college so he could join the Navy in July 1960. But his interest in dramatics has continued.

While stationed at Key West, Fla., he appeared in a production of *South Pacific*. It was also during that tour that he took two weeks leave to work in *PT 109*.

After reporting aboard *Canberra* in December 1962, Elliston continued his winning ways by taking first place in a talent contest in the Mediterranean.

He plans to go into work involving public speaking or further his career as an actor after his separation from the Navy later this year.



NAVAL SUPPLY Center, Norfolk has begun her 46th year of operation. Some of her many sea-going customers can be seen in the background.

Food Can Become An Art

Students at Newport's Naval War College had been familiar with Navy chow for many years but many of them may have considered it something less than a work of art. They were given the opportunity to change their viewpoint, however, when the Northeast Field Food Service Team at the Newport Naval Supply Depot prepared an exhibit to acquaint senior officers with the services and training available in general mess operations. They also demonstrated what could be done with ration-dense and irradiated foods.

When confronted with a log cabin made of eclairs, sculptured cakes, a noodle basket and a pastry cornucopia (to mention only a few of the goodies on display) the officers got the message that specialized and intensive on-the-job training programs for commissary personnel can pay off in extraordinary performance.

The job of the Field Food Service Teams is to spread the gospel of good eating throughout the Navy, which they do upon invitation by a ship or shore activity.

During a two-week course, training films are shown and demonstrations are given showing proper techniques of galley operation. They include administration, menu planning, food operation and service, sanitation and equipment utilization.

The team members themselves keep up with changes and new developments in food processing. They attend schools and seminars; visit and participate in food shows and read professional trade journals.

It all adds up to an increased challenge to the commissaryman to perform his duties efficiently and to produce a finished product which is something more than just a square meal.

HELICOPTER from *USS Altair* (AKS 32) delivers a load of cargo to *USS Independence* (CVA 62) in Med.



Flight Decks are Busy

With naval aviation acquiring sufficient age to rack up respectable numbers, Navy fliers let their accomplishments be known. Here are a few examples:

While USS *Valley Forge* (LPH 8) was undergoing refresher training

off San Diego earlier this year, she recorded the 18,000th helicopter landing on her flight deck.

USS *Intrepid* (CVS 11) recorded her 4000th helicopter landing. She also racked up her 79,000th arrested landing.

Venerable *Lexington* (CVA 16) chalked up her 100,000th landing during the first quarter of 1964.

In March, an F8U *Crusader* made the 125,000th landing on the deck of USS *Franklin D. Roosevelt* (CVA 42) and USS *Coral Sea* (CVA 43) chalked up her 126,000th arrested landing.

Meantime, back at the base — Pensacola's Saufley Field, to be exact — Training Squadron One's Flight 12 clocked 70,000 accident-free flight hours.

Saufley Field statisticians broke this figure down into 400 hours in spins, 8000 hours in landing patterns, 280,000 landings and 300 hours in loops.

Twenty Candles for Hancock

USS *Hancock* (CVA 19) recently joined the company of U. S. naval vessels which have counted 20 candles on their birthday cakes. For an attack carrier, 20 years is a ripe old age. *Hancock* consoled herself, however, by spending her birthday in a maritime beauty salon getting a complete overhaul, after which she is expected to feel as young as the youngest afloat.

Hancock had a pretty rough youth even though she was a latecomer (1944) to World War II.

She sailed from Pearl Harbor on 24 Sep 1944 to join ADM Halsey's Third Fleet in the western Caroline Islands. Here she was assigned to VADM Mitscher's Fast Carrier Task Force 38.

TF 38 made a rendezvous west of the Marianas and, (at a point off Okinawa on 10 Oct 1944, *Hancock's* planes rose off her deck in 156 sorties during that day alone carrying, with planes from the other carriers, destruction to Okinawa's airfields and shipping.

Hancock had her first narrow escape near Formosa. As she was retiring with the task force to the southeast on the afternoon of 14 October, she came under attack from enemy aircraft. A plane was splashed after it had passed over the ship, dropping a bomb about 400 yards off the port bow. Another bomb penetrated *Hancock's* 20mm gun platform but exploded harmlessly in the water.

The few remaining enemy planes were driven off and *Hancock* steamed with the task force to support the amphibious landings in the philippines.

After pounding airfields and shipping in the Philippines, she was on her way to Ulithi and replenishment when she was ordered to turn back to the area off Samar to assist in the search for units of the Japanese fleet reported to be closing on Leyte. This was the preliminary to the Bat-

Dam Sand Makes the Scene—Bring Your Own Camel

Hard put to find a place where your pet camel will feel at home? Take him to Dam Neck, Va., where a Navy do-it-yourself project is producing scads of sand dunes along a three-mile stretch of beach.

This project has nothing to do with Lawrence of Arabia. The Navy is reconstructing dunes where they were once found in abundance.

The three-mile shoreline has been losing the battle with erosion at a slow, though steady, pace since the base was established in 1942. Sand dunes were built and provided a partial deterrent, but the greedy Atlantic Ocean still managed to gulp up almost 100 feet of the shore during these years.

Then nature sent a clincher in the Spring of 1962. A tempestuous storm sent more hungry waves crashing ashore, and this time they devoured most of the sand dunes and more of the shoreline. Hundreds of tons of sand were washed away leaving several buildings, including the married officers' quarters, vulnerable to flooding and erosion.

After the storm subsided, Seabee bulldozers were called in from Little Creek Amphibious Base to retrieve as much of the beach as they could. But it was clear to base officials that the dunes would never endure another heavy Atlantic lashing.

Now, two years later, a stable shoreline is beginning to take shape as the result of careful planning by the base public works and security departments. Thanks to cooperation received from the U. S. Department of Agriculture and lots of hard work, a solid wall of dunes will soon fortify the naval establishment against any repeat of the Ash Wednesday assault.

The 1962 storm demonstrated that dunes not covered by beach grass will not withstand heavy pounding by the sea. Dunes that were washed away had no grass. Those that had grass were much less affected. The roots of beach grass reach as far as 12 feet down in the sand and hold it in place.

For a number of years the Department of Agriculture, in cooperation with the University of Maryland, has been improving a strain of American beach grass which is native to the East Coast. Sprigs from nurseries in Beltsville, Md., are being distributed to state governments and military installations along the Atlantic for replanting to combat shore erosion.

In April 1963 Dam Neck received 10,000 sprigs. These were transplanted in a nursery plot on the base for propagating. In the meantime, dune reconstruction was begun.

For this project, bulldozers pushed sand up into six-foot-high ridges. Then snow fencing was placed along the tops and on the inland side to catch wind-blown sand.

As the project progressed, the fencing was eventually covered with sand, then more rows of fencing were placed on top. This method is continued until the dunes are built to a height of about 12 feet and a width at top of 30 feet.

Some dunes at Dam Neck have now reached the four-tier level. In the two years since inception of this project, more than 15 miles of fencing have been used.

Recently, the 10,000 sprigs that had been propagating in the nursery plot were transplanted onto the new dunes. Also, 20,000 more mature sprigs arrived from Beltsville and were planted. Since the grass is of the runner type, one sprig can produce hundreds of new plants.

Before the 100 acres of Dam Neck dunes were planted, 12 tons of fertilizer were spread by means of a helicopter. A quarter of the dunes have so far been planted in this manner.

After dunes have been planted with grass they will continue to grow as the grass catches drifting sand. Some experts estimate that dunes can raise as much as a foot every year, and there seems to be no limit to the size to which they can grow.

—Bill Weesner, JO1, USN

tle for Leyte Gulf and all available U. S. ships prepared for action.

Although *Hancock* didn't reach Samar in time to help the light escort carriers in the main action of the Battle of Samar, her planes caught the fleeing Japanese center force on 25 October.

After this action, *Hancock* again joined other carriers for strikes at the Philippines where she attacked shipping and enemy airfields. During this action, *Hancock* didn't entirely escape a suicide dive although her antiaircraft gunners exploded the plane some 300 feet above the ship.

A section from the enemy aircraft's fuselage landed amidships and part of the wing hit the flight deck where it burst into flames.

Hancock continued to fight off dive bombers during the ensuing enemy raids which scored suicide hits on *Intrepid* (CV 11), *Cabot* (CVL 28) and *Independence* (CV 22).

Hancock landed many of *Intrepid's* planes which were blocked from their own ship by flames, while destroyers and cruisers picked up men who had been forced over the carriers' side by heat and explosions.

Until the end of the war *Hancock* continued to hit enemy shipping and air bases.

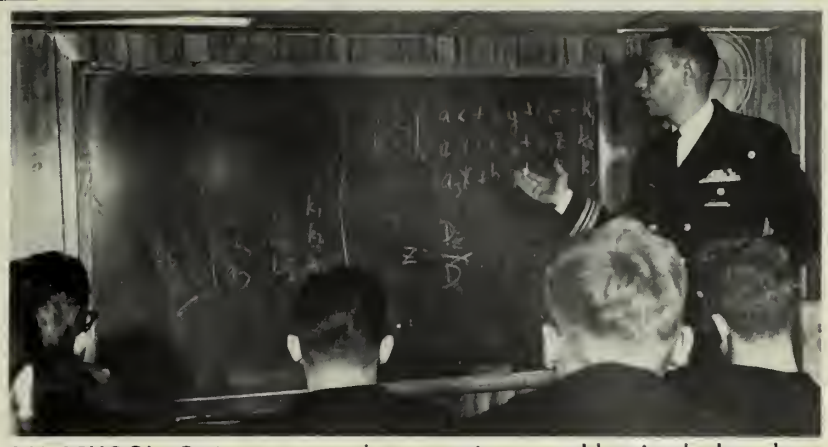
On 25 Aug 1945, her planes flew missions over Japan dropping supplies and medicines. It was information obtained during these flights which made possible later landing of doctors, supplies and medicines for Allied prisoner of war encampments.

During her war career, *Hancock* earned the Navy Unit Commendation, four battle stars and other awards.

Hancock received her first conversion and modernization treatment to an attack carrier in December 1951. During conversion she was fitted with the new steam catapults (which at that time were new indeed). She was recommissioned in 1954. At San Francisco, in 1956, she was fitted with an angled flight deck which made for faster and safer aircraft landings.

After her 20th birthday face-lifting, *Hancock*, which spends much of her time in the Far East, will be able to compete with any of her sisters.

As Mehitabel the cat would say to Archy the cockroach, "Tres gai, Tres gai, Archy. There's life in the old gal yet."



SEA SCHOOL—Cruisermen pay close attention to problem in algebra class.

Canberra's Campus Is Blue, Wet and Wide

The men aboard the guided missile heavy cruiser USS *Canberra* (CAG 2) can now obtain college credits, receive help in paying tuition costs and never leave the ship.

Through this educational program, men aboard *Canberra* receive college credit from Old Dominion College, Norfolk, Va. The courses are taught by naval officers with advanced degrees who have been certified by the college; they are listed as instructors on the faculty.

Tuition cost for a *Canberra* student is the same as the fee charged on campus, but tuition aid from the Bureau of Naval Personnel, amounting to $18 per subject per quarter, requires the student to pay only six dollars.

Classes are held after working hours in the ship's classroom, an old handling room for three-inch shells, that was no longer needed after *Canberra's* conversion to guided missiles. Each class meets a minimum of 10 hours per quarter per credit, which means a total of 30 class hours per course. Eligible students are certified by the ship's Education and Training Officer as having completed high school or earned a GED equivalent which satisfies the college admission requirements.

Students who successfully complete a course receive the same credit as those who attend college on a full-time basis. The credits earned may later be transferred to another college or university.

A total of 176 *Canberra* men have taken advantage of this program since its inception in 1961. In *Canberra's* 1963-64 spring quarter, 39 students were enrolled in the two courses offered—Integrated Algebra and History of Philosophy.

READY TO LEARN—CDR L. I. Somers, CHC, USN, checks out books for class in philosophy that he teaches. *Rt: USS Canberra*, floating college, at sea.





THE BULLETIN BOARD

Your Ship May Be Making History—Here's How to Record It

TO THE AVERAGE Navyman who spends one routine day after another at sea, the idea that he and his ship are making history may come as a surprise. Such is the case, however. The Navy is an instrument of national policy, hence its ships and the Navymen who serve in them inevitably play a role in shaping our destiny.

You may shrug and wonder what your ship is doing that's important. The answer is that even a routine mission of your ship may have important results. As a part of the Navy, your ship's very existence is a factor in making history.

And whether you realize it or not every ship in the Navy becomes a part of written history, for each year —on 1 January, to be precise—the commanding officer of each Navy ship is required by the Chief of Naval Operations (through instruction in the 5750.7 series) to submit a historical account of its operations during the past calendar year to the Naval History Division.

This account is important to the Navy because it provides a continuous record of narrative data which will give your ship its proper place in the history of the Navy and of the United States.

If the report isn't submitted to the Navy Department your ship (historically, at least) may become just another cork bobbing around in a teaspoonful of ocean—until and unless some enterprising officer comes along at a later date to fill in the gaps —if they can be filled.

The number and types of people who are interested in your ship's story would probably surprise you. Ship's histories are in demand by researchers and writers and public information officers on whom the Navy depends to keep the nation informed on events in the Navy. They are also in demand by your family and friends. Someday you will want a copy of the story of your ship for yourself. Former crew members like to know what their old ship has been doing, as do Navy enthusiasts who make a point of knowing what goes on in the sea service.

All-Navy Cartoon Contest
Thomas Rabert Gunlack, LTJG, USN



"Navigator!"

Check any library and the chances are you will find shelves of books whose authors have drawn upon the information which originated in a CO's report of your (or some other) ship's activities.

Although your ship's undertakings may have been something less than earth-shaking, it really doesn't matter. When your CO sends in his chronology of the year's events, his information doesn't have to be of any great moment in itself, nor does it have to be written in undying prose.

His report may simply be like a letter back home, in which he tells of your ship's particular readiness mission and the nature of the tasks in which her immediate command is involved. He will tell how the ship has accomplished its tasks and contributed its part to training, science, goodwill or the defense of the nation.

If you are a plank-owner, you might be asked to fill in some specific information which is missing, if the captain is looking for data which is beyond the scope of the ship's logs.

Your CO may also use interesting items from the newspapers about the ship or copies of documents between the officers and crew or with members of foreign navies, governments or distinguished personalities.

Perhaps your ship accomplished a job in a noteworthy manner. It may not be big—just a good refueling or rigging time. Something like this is done by every ship and is always worth mentioning.

Other times your ship may possess something out of the ordinary, such as a homeward-bound pennant three miles long. If this is the case, your captain will mention it in his report.

The chances are that someday, sometime someone will want to know your ship's story. Even though you may not consider some of the items included in your CO's annual report to be significant, in the over-all picture or in the light of subsequent events, they may assume a proportion which you could not foresee when the report was made.

When they do, your CO's recording of events as they occurred will have been included in a formal history by the Ship's History Section of the Naval History Division.

Writers will be provided with authentic source material. Navy publicists will have facts which will satisfy the public's demand for information, former crewmen and Navy enthusiasts will have their sea lore and memorabilia.

Most important, however, your ship will be assured of its place in the fabric of world events.

Rudolph C. Sondo, MR1, USN



"Mork my words, Joe, these Saturdoy morning inspections will snowball. You just wotch."

Navy Relief Society Donates Funds for Scholarships Via Navy Wives Clubs

The number of college scholarships available to Navy sons and daughters through the Navy Wives Clubs of America has been increased nearly fourfold. The Board of Managers of the Navy Relief Society has voted unanimously to grant $10,000 to the Navy Wives Scholarship Foundation —increasing by 20 (from seven to 27) the number of scholarship awards that may be made to students this year.

Though a number of administrative details regarding the grant have yet to be worked out, it appears recipients of the new scholarship money will be required to meet the general eligibility requirements which have governed past awards.

Only the sons and daughters of enlisted Navy and Marine Corps personnel will be eligible for the 20 new scholarships for college. Children of Coast Guard personnel, in addition to those of Navymen and Marines, will continue to be considered for the other seven education grants.

In general, the recipient of a scholarship must:

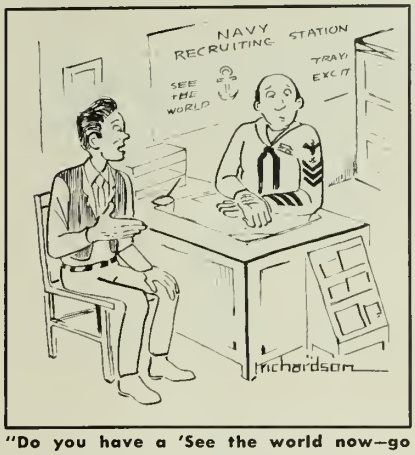
- Be the child (includes legally adopted children and stepchildren) of an enlisted member of the Navy, Marine Corps, or Coast Guard who is on active duty, retired with pay or deceased. (Subject to restriction of paragraph next above).
- Be in need of financial assistance with regard to post-high school education.
- Be a graduate of an accredited high school (or the equivalent), or be qualified for graduation before the beginning of the next academic year. (Applicants already doing college level work automatically fulfill this requirement.)
- Have a reasonably sound scholastic standing.
- Be physically capable of completing the course undertaken.
- Be of good moral character.

The Navy Wives scholarships may be used to obtain college educations or vocational, business or other training. Applicants should be approved for admission or be reasonably sure they will be able to gain admission to the school of their choice before applying for a scholarship.

The scholarships are outright grants of at least $400 for the freshman year, paid directly to the school concerned. Renewal awards are considered for those completing the freshman year with good records.

Applications are available at the Bureau of Naval Personnel (Pers G-221) or at any Navy Wives Club.

All-Navy Cartoon Contest
Sam Richardson, PHAN, USN



"Do you have a 'See the world now—go to boot camp later' program?"

Annual $500 Scholarship Offered at FRA Meeting

An annual $500 scholarship, dedicated to the memory of Schuyler S. Pyle, was authorized by the Fleet Reserve Association at its 35th annual convention. It will be given to the son or daughter of a member of the naval establishment who is an association member, to be used for his or her education at the college level.

The recipient will be selected on the basis of need, scholastic standing, character and leadership and the following qualifications:

- The applicant must be the dependent son or daughter of a Navy or Marine member of the Association. At the time the award is made, the member may be either deceased, active or entitled to retainer or retired pay. He must, however, have been a member in good standing as of 1 April of the year in which the award is made.
- The applicant must be a prospective graduate or have graduated from an accredited high school or its equivalent. A student already attending an accredited college may also apply for the scholarship provided he or she hasn't previously received such an award.

The scholarship, when awarded, must be used for educational expenses at an accredited college during the academic year.

The Fleet Reserve Association also offers an annual $500 tuition scholarship to dependents of naval person-

These Naval Histories Are Available from SupDocs

Even a casual study of almost any publisher's list will indicate a widespread interest in naval affairs. Here, for example, is a list of Naval History Division publications available through the Superintendent of Documents, Government Printing Office, Washington 25, D.C. These books are listed here because, as you will find, almost all of them have, in varying degrees, depended upon ship's histories as their basic material. In years to come, it is highly possible that your ship will play a role in similar works.

- *Admiral Richard Wainwright and the United States Fleet*, by Damon E. Cummings.
- *Administration of the Navy Department in World War II, by* Julius A. Furer.
- *At Close Quarters, PT Boats in the United States Navy,* by Robert J. Bulkley, Jr.
- *Beans, Bullets, and Black Oil, the Story of Fleet Logistics Afloat in the Pacific During World II,* by Worrall R. Carter.
- *Destroyers in the United States Navy.*
- *Dictionary of American Naval Fighting Ships, Vols I and II.*
- *History of United States Naval Operations, Korea,* by James A. Field.
- *Ships, Salvage and Sinews of War; the Story of Fleet Logistics Afloat in Atlantic and Mediterranean Waters during World War II,* by Worrall R. Carter and Elmer E. Duvall.
- *United States Naval Chronology, World War II.*
- *United States Naval History, Naval Biography, Naval Strategy and Tactics, a Selected and Annotated Bibliography.*

nel, active, retired (with pay) or deceased to be used at any accredited college of the recipient's choice.

Application forms for next year's scholarships may be obtained from Pers G221, Bureau of Naval Personnel, Navy Department, Washington, D. C. 20370, and must be returned no later than 1 Apr 1965.

Dolphin Awards Make School Easier for Five This Fall

Five students who were graduated from high schools as far apart as Charleston, S. C., and San Diego, Calif., and whose primary interests lie in such diverse fields as nuclear physics, education and medicine, will receive $500 scholarship grants from the Dolphin Scholarship Foundation when they enter college this fall.

These five 1964 recipients bring to 17 the number of students who have received financial assistance from the rapidly growing Dolphin Scholarship Foundation.

The Foundation was established in 1960 to give deserving children of members and former members of the U. S. Submarine Service financial aid for college education. The Foundation draws its financial support primarily from work projects of the organized women of the submarine forces, and from contributions from men in the submarine forces. Other interested individuals, companies and organizations throughout the country have also made contributions.

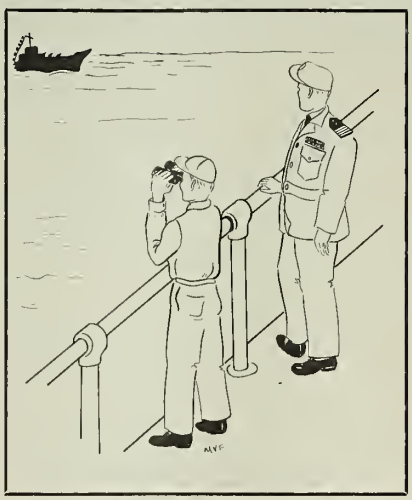
Candidates for the grants are selected by a board in BuPers on the basis of the applicants' academic proficiency, all-around ability, character and financial need.

This year's recipients are:

- Lawrence Shaw, son of Chief Electricians' Mate (retired) and Mrs. William L. Shaw. In high school, Shaw was a member of the National Honor Society and vice president of the student body, and was active in sports and community affairs. He plans to major in nuclear physics, working toward a doctorate in this field.
- Janie Horan, daughter of Chief Engineman and Mrs. John D. Horan. Janie was editor of her school newspaper and a member of many student organizations. She plans to study to become a surgeon.
- Kathryn Dibsie, daughter of Senior Chief Engineman and Mrs. Anthony J. Dibsie. She belongs to the California Scholastic Federation and the Future Teachers of America, and plans to major in education.
- Terrance Barker, son of LT and Mrs. Monroe W. Barker. He plans to study electrical engineering.
- Frederick Hartley, son of CWO and Mrs. Clair C. Hartley. He plans to major in chemistry.

The directors of the Foundation hope to increase the amount of scholarship grants to $10,000 annually by 1965.

All-Navy Cartoon Contest
Marion VanBuskirk Frasier



"I'm not sure, Sir, but it looks like 'Our Old Man can lick your Old Man'."

Dolphins Are Hard to Catch

Submariners may be divided into two distinct (if unofficial) categories: the qualified, who wear dolphins; and the unqualified, who don't.

An unqualified Navyman is one who has checked aboard his first sub but does not yet understand the operation of his ship well enough to be a qualified submariner. He has a maximum of seven months to earn his dolphins.

During this time he must learn the nomenclature of the sub as well as operation of equipment from the torpedo tubes to the ballast tanks. He spends time in each compartment, where he is checked out by a qualified petty officer.

To qualify within the time allotted him, the new man must keep up with a schedule set by the ship's qualifications officer. Men who keep abreast or ahead of the schedule rate most privileges given to qualified submariners, but those who fall behind must spend most of their recreation and liberty time concentrating on their studies in order to catch up.

Once the unqualified man has become familiar with all phases of submarine operations, he must take a written and oral examination. The oral test is given by the ship's qualifications officer, who escorts the new man through the ship and asks pointed questions on equipment, nomenclature and procedures.

If the examining officer is not satisfied with the Navyman's performance, it's back to work. Otherwise, the submariner becomes eligible to wear the submariner's dolphins.

List of Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

The World of Henry Orient (2646) (C) (WS): Comedy; Peter Sellers, Paula Prentiss.

The Third Secret (2647) (WS): Suspense Drama; Stephen Boyd, Pamela Franklin.

The Best Man (2648): Drama; Henry Fonda, Cliff Robertson.

The Brass Bottle (2649) (C): Comedy; Tony Randall, Burl Ives.

A Distant Trumpet (2650) (C) (WS): Action Drama; Troy Donahue, Diane McBain.

Alone Against Rome (2651) (C) (WS): Melodrama; Lang Jeffries, Rossana Podesta.

From Russia with Love (2652) (C) (WS): Melodrama; Sean Connery, Pedro Armendariz.

Captain Newman, M. D., (2653) (C): Comedy Drama; Gregory Peck, Tony Curtis.

Advance to the Rear (2654) (WS): Comedy; Glenn Ford, Stella Stevens.

Tamahine (2655) (C) (WS): Comedy; Nancy Kwan, John Fraser.

Torpedo Bay (2656): James Mason, Lilli Palma.

Wild and Wonderful (2657) (C): Comedy; Tony Curtis, Christine Kaufmann.

Looking for Love (2658) (C) (WS): Musical Drama; Connie Francis, Jim Hutton.

Duel of Champions (2659) (C) (WS): Melodrama; Alan Ladd, Franca Bettoda.

Commando (2660): Melodrama; Stewart Granger, Dorian Grey.

Lolita (2661): Drama; James Mason, Shelley Winters.

The Cardinal (2662) (C) (WS): Drama; Tom Tryon, Romy Schneider.

Goliath and the Sins of Babylon (2663): Melodrama; Mark Forest, Jose Greci.

The Secret Door (2664): Suspense Drama; Robert Hutton, Sandra Dorne.

Rhino (2665) (C): Drama; Shirley Eaton, Robert Culp.

NAOs Must Keep Air Skills When Not in Flying Status

Naval Aviation Observers are now required to retain their flight proficiency while on duty which does not actually require flying. This puts the NAO in the same category as the Navy pilot who is required to fly a minimum of four flight hours a month and 90 hours per year.

And, again like pilots, NAOs will now draw flight pay regardless of their billet.

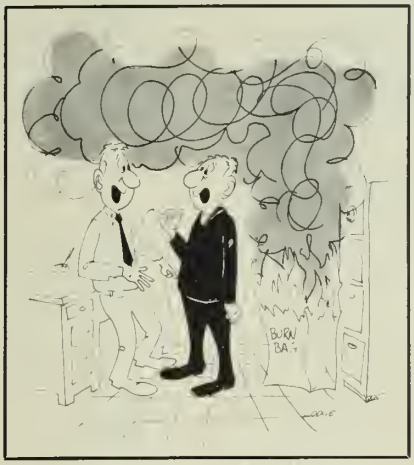
Heretofore, many NAOs did not fly while on shore duty and, after a tour in a non-flight status, became rusty or lost interest in the NAO program.

New requirements are outlined in BuPers Notice 3700 dated 1 May 1964. The notice also announces the discontinuation of NAO designations R, T and A.

There are no longer any billets for R (radar) and T (tactical) NAOs. Officers who hold these designations but are qualified in another NAO field may request a change in their specialty.

The aerology (A) category has also been dropped for the Naval Aviation Observers program, but a few flight billets still require meterorological skills. These will be filled by meteorological officers who are temporarily assigned to flight duty.

All-Navy Cartoon Contest
LCDR Billups E. Ladge, USN



"But Chief, it said 'Burn Bag!' "

X-Ray Correspondence Course

A correspondence course entitled *Fundamentals of X-Ray Physics and Technique* (NavPers 10702) is now available to medical department officers or enlisted men.

The course consists of eight assignments and is evaluated at 18 Naval Reserve promotion and/or retirement points.

Applications may be submitted on NavPers Form 992 and forwarded (via appropriate channels) to the Commanding Officer, U. S. Naval Medical School, National Naval Medical Center, Bethesda, Md. 20014.

Three New Correspondence Courses Issued for EMs

Three correspondence courses have been issued and are available through the Naval Correspondence Course Center, Scotia, N.Y. Of the three, two are revised courses and one is a new issue. The three are:

- *Hospital Corpsman* 1 & *C*, NavPers 9167-1 (supersedes NavPers 91671-A). and NavPers 91670-1.
- *Machine Accountant* 1 & *C*, NavPers 91275.
- OCC *ASW Operations*, NavPers 10406-A (Confidential – supersedes NavPers 10406).

HOW DID IT START

Hand Salute is Simple But Meaningful

As naval customs go, the hand salute is a relotively recent innovation. It had its beginnings as early as the middle 1800s, but was not commonly accepted until the 1890s.

Most historians agree that the hand salute is a simplification of doffing the hat, a custom rooted in antiquity.

In the old Navy, juniors were required to remove their hats in the presence of an officer.

But by 1849, records show that some captains had given their petty officers permission ta just tauch their hats on occasions when seamen were obliged to remave them completely. This may have been the origin of the hand salute.



In 1869 the hand salute became officially acceptable on some occasions. *U. S. Navy Regulations* still demanded that juniors remove their hats when passing ar meeting seniors, but the men were permitted to just tauch their hats when addressing the OOD ar executive officer.

It was 24 years later that the new salute became mandatary under all circumstances. An 1893 capy of *Navy Regs* required all Navymen ta render a salute to seniors on all occasions when tipping the hat was formerly accepted. *Navy Regs* alsa stated that salutes were to be rendered and returned regardless of whether or not either person was in unifarm.

Juniors salute first. This is probably a carry-aver from the middle ages. It was customary, when twa knights in armor met, to raise their visars so they could be identified as friend or enemy. Rank was well defined in those days, and it was only naturel that the junior would be the first ta identify himself.

Today, the hand salute is more than custom. It is required by regulations. Perhaps one af the best-knawn military traditions, it denotes respect for the unifarm and the country it represents.

Latest Report on Length of Standard Navy Overseas Tours

Below is a roundup of standard overseas tour lengths. Time creditable to your overseas tour begins the month you depart the U. S. and ends when you return upon permanent change of station. Locations indicated by an asterisk are areas in which dependents are permitted only when government quarters are available. Attache personnel are excluded. Any changes will be listed periodically.

	Accompanied by Dependents	All Others
Alaska		
Aleutian Peninsula and Islands West of 162d Meridian including Adak, Attu, and Dutch Harbor	18	12
Anchorage area including Elmendorf AFB and Fort Richardson	36	24
Big Delta area including Fart Greely	24	18
Fairbanks area including Eielson AFB, Ladd AFB and Fort Wainwright	30	18
Juneau area	24	18
Kenai-Whittier area including Wildwood Station	24	18
Fire Island	N/A	12
Kodiok Island	24	12
Murphy Dome	N/A	12
Nome area	24	12
Point Barrow area	18	12
Anguilla (West Indies)	24	18
Antarctica	N/A	Indef.
Antigua	24	18
Argentina	36	24
Aruba	24	18
Australia (except Alice Springs)	36	24
Alice Springs	24	18
Austria	36	24
Azores	24	18
Bahrein Island	15	12
Barbodos	24	18
Belgium	36	24
Bermuda	36	24
Bolivia	24	18
Brazil (except Fortaleza, Recife, Salvadore, Santa Cruz)	36	24
Fortaleza	N/A	18
Recife	24	18
Salvadore	24	18
Santa Cruz	24	18
Burma (except Rangoon)	24	12
Rangoon	24	14
Cambodia	24	12
Canada		
Labrador (except Goose AFB)	24	12
Goose AFB	24	15
Metropolitan areas	36	24
Newfoundland		
Argentia	24	18
St. Johns	36	24
Stephensville	30	18
Other areas	24	12
Chichi Jima	18	12
Chile	36	24
Christmas Island	N/A	12
Colombia	36	24
Congo, Republic of (Leopoldville)	24	12
Corsico	N/A	18
Costa Rica	36	24
Crete	24	18
Cuba (Guantanamo)	N/A	12
Cyprus	24	18
Dohomey	24	12
Denmark (except Karup Air Station)	36	24
Karup Air Station	N/A	18
Dominican Republic	36	24
Ecuodor	24	18
Egypt	36	24
Eleuthera	24	18
El Salvador	36	24
Eniwetok	N/A	12
Ethiopia, except Eritrea (Asmara), Massaua, and Harrar	24	18
Eritrea (Asmara)	30	18
Massaua	N/A	12
Harrar	N/A	12
France	36	24
Germany (except Rendsburg)	36	24
Rendsburg	N/A	18
Greece		
Athens and vicinity	30	18
Other locations	N/A	12
Greenland	24	12
Guam	24	18
Guatemala	36	24
Haiti	36	24
Hawaiian Islands	36	24
Honduras	24	18
Hong Kong	36	24
Iceland	24	12
India	24	12
Indonesia	24	14
Iran (except Teheron)	24	12
Teheran	30	18
Iraq	24	18
Italy	36	24
Ivory Coast	24	12
Iwo Jima	N/A	12
Japan (except Wakkanai, Kuma Shima, Kobe-Akashi-Osaka areas)	36	24
*Wakkanai	24	15
Kuma Shima	N/A	12
Kobe-Akashi-Osaka Area	24	15
Johnston Island	N/A	12
Korea	24	13
Kwajalein	18	12
Laos	24	12
Liberia	24	18
Libya (except Tripoli)	24	12
Tripoli	36	18
Mali	24	12
Malta	24	12
Mexico	36	24
Midway Islands	18	12
Morocco		
Ben Guerir area	24	12
Casablanco area including Nouasseur	36	24
Marrokech area	30	18
Port Lyoutey area including		

	Accompanied by Dependents	All Others
Boul Haut, Rabat and Rabat Sale	30	18
Sidi Slimane	24	12
Netherlands	36	24
New Zealand	36	24
Nicaragua	24	18
Niger	24	12
Norway	36	24
Pakistan (except Lahore and Peshawar)	24	18
Lahare	N/A	15
*Peshawar	24	15
Palestine, UN Truce Supervisory Organizatian	24	12
Panama including Canal Zone	36	24
Paraguay	24	18
Peru	36	24
Philippine Islands (except as indicated)	24	18
Mindanao; Balanga area (Bataan); Laoag, Lubang	N/A	12
Wallace Air Statian	N/A	15
Portugal	36	24
Puerto Rico	36	24
Ryukyus Islands	30	18
Saint Lucia	N/A	12
Saipan	24	18
San Salvador	N/A	12
Saudi Arabia	18	12
Senegal	24	12
Sicily, Sigonella	24	18
Spain (except El-Ferral and Cartagena)	36	24
El-Ferral and Cartagena	24	18
Surinam	24	18
Taiwan (except Kinman, Matsu)	24	15
Kinman, Matsu	N/A	12
Thailand (except Bangkok)	24	12
Bangkok	24	18
Trinidad	24	18
Turkey		
Ankara, Istanbul and Izmir	30	18
Adana, Sile, Galcuk and Karamausal	24	18
Trabzon, Samsun and Diyarbakir	N/A	15
Other areas	N/A	12
Turks Island	N/A	12
United Kingdom (except Londonderry, Ireland; and Edzell, Scotland)	36	24
Londonderry, Ireland	24	18
Edzell, Scotland	24	18
Upper Valta	24	12
Uruguay	36	24
Venezuela	36	24
Vietnam	24	12
Wake Island	18	12
Yugoslavia	24	18

• **PRE-TRANSFER INTERVIEWS**—If you have had a long standing illness that is considered incompatible with assignment to duty in an overseas area, don't expect orders to duty there. On the other hand, if you are in good health, but one or more of your dependents have chronic physical or mental ailments, don't expect orders to duty in an overseas area where your dependents can normally be expected to accompany you.

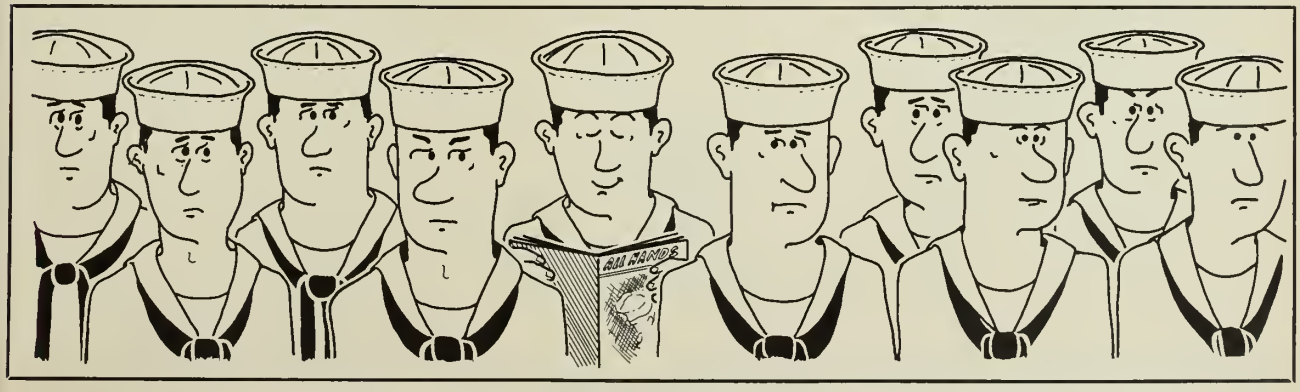
Few overseas activities have enough facilities to properly treat many of these illnesses. It has been found that when tours are cut short, and personnel are sent back to the States for medical treatment, the activities have suffered. This is because many overseas activities are so small that vacancies caused by personnel being sick or requiring evacuation for treatment can adversely affect the operation of these activities. In addition, a hardship is imposed upon the others who must take over the extra workload. Fortunately, the total number of these cases has been small.

This all means that, before you become too deeply involved in travel preparation, you will have a talk with your personnel officer. He'll inquire whether you or any of your dependents have had any illnesses of a recurring nature. He'll also be required to do some checking into other matters such as how competent you have been in your work, and whether you or your dependents have a disciplinary record.

Basically, the idea is to make sure that the best possible people are sent overseas to represent the United States.

If you are an officer, this little chat must take place before your orders are delivered to you. If you are enlisted, you must have the interview before Standard Transfer Orders are prepared.

Be ready for this talk. More information is in BuPers Inst. 1300.26C.



YOU CAN'T WIN any popularity contests by monopolizing ALL HANDS. Remember to pass it on to nine others.

Answering the Call of Napoli? This Is What You'll Find

NAPLES' LOCATION in the Mediterranean is almost at the center point of a sea which extends some 2000 miles from Gibraltar to the Mid-East. It is a great Italian sea port and a hub of activity that has become increasingly well known to U. S. Navymen, not only to sailors of the Sixth Fleet who know it as a friendly liberty port, but to Navy families that are assigned there for duty.

Like the U. S., Italy is a member of the North Atlantic Treaty Organization. Naples is not only the location of U. S. naval support activities, but also the center of NATO's Southern European Command.

There you may be assigned to the headquarters of COMFAIRMED, COMNAVACTMED, COMNAVACTS Italy or COMNAVSUPPACT Naples. There are also a Naval Air Facility and various other units where Navymen serve.

These add up to a sizeable number of billets. If you are headed for Naples you'll be interested in the following report on duty in this area.

If your orders are issued far enough in advance, you will be assigned a sponsor from the command to which you are ordered. Your sponsor will probably be of your rank or rate and will work in the office where you can expect to be assigned. He will write you (again, time permitting) and offer to make hotel reservations for you and your family, meet you on arrival, and provide you with his observations of duty in Naples.

If no sponsor is assigned, or if you arrive unexpectedly, you will still find people willing to assist you. If you don't know the ropes, your new command's duty officer can be reached by telephone. Normally, Navy representatives meet each incoming ship and aircraft to give you a hand with baggage and transportation to local hotels.

Before leaving the States, you must take care of: Passports for dependents, inoculations, overseas travel arrangements, and shipment of household effects and automobiles.

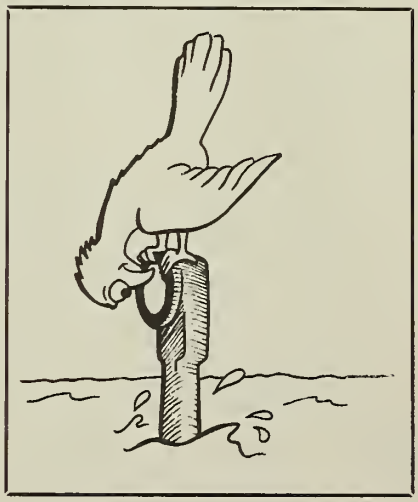
Military personnel may enter Italy on their official military orders and, for most purposes, their Armed Forces Identification Card will enable them to travel throughout Italy and other NATO countries. A passport is a convenience for travel to other areas and, in case your new duty requires such travel, can be obtained from the American Consulate in Naples.

All European countries require passports for dependents, including children; Portugal, Finland and Yugoslavia require passports for military personnel. Dependent passports are obtained before leaving the United States and the cost is $1.00 if requested through the Navy Department. These passports can be renewed through American consulates overseas. No visa is needed for Italy. After arrival, temporary passports can be obtained for four months on request to the American Consulate.

Persons in the Washington, D. C., area should apply for passports in sufficient time to allow two to four weeks for processing in addition to the necessary mailing time. Usually, assistance can be obtained by telephoning or writing to the Navy's Passport Division. Persons outside Washington should allow six to eight weeks for processing and mailing. Application is made to the nearest federal court or state court authorized to naturalize aliens.

Passports for dependents are usually forwarded to the port of embarkation for pickup. For example, if you are ordered to fly via MATS leaving from McGuire AFB, N.J., your passport will be waiting for you at the Navy Air Transportation Office at McGuire.

All-Navy Cartoon Contest
Thomas Robert Gunlock, LTJG, USN



"Dive! Dive! Dive!"

Transportation—Forward your "Request for Dependent Travel" (DD 884) to BuPers. The type of transportation will be specified in your orders. By sea, it would be a commercial liner, using charter space, such as the ss *Independence or* ss *Constitution*. By air, the Military Air Transport Service (MATS) would be involved. It might be a combined Fleet Tactical Support Squadron/MATS flight, or a combination of commercial/MATS travel.

No entry approval is required for dependents traveling to Italy and concurrent travel is normally authorized. (This authorization for concurrent travel must be included in your orders before you can apply for a dependent's passport.)

Personnel traveling by air are usually required to report to McGuire AFB, N.J.; Charleston AFB, S.C.; or the Naval Air Station, Norfolk, before midnight of the day before departure. Aerial port of debarkation in Naples is Capodichino, the home of the Naval Air Facility, Naples.

Personnel traveling by commercial ship are usually required to report to the Overseas Passenger Transportation Office, Brooklyn Army Terminal, Brooklyn, N.Y., before 1000 on the day before sailing. Port of arrival in Italy is Naples.

Shipment of Personal Property—The rules regarding shipment of household goods and automobiles are given in *Joint Travel Regulations*. In general, expect approximately a two-month in-transit period from an east coast loading port to Naples. Commercial shipments are subject to lengthy delays in customs. Have four copies of your orders, one certified, for each shipment of household goods and hold baggage.

Household Appliances—An unfurnished apartment in Naples is literally just that: Stove and refrigerators are not furnished and, if the apartment is new, it may be minus hot water tank, wall fixtures and bathroom fixtures. Almost all electrical appliances used in the States should be brought to Italy. Transformers which convert local electricity, 220 volts, 50-cycle to 110 volts, can be

purchased locally for about $30.

(American TV sets require minor modifications to bring in the sound portion (cost about $15). American phonographs also require minor modifications (about $3).

In deciding which appliances to bring remember that electricity in Italy is *not* cheap. An average monthly bill for a family of five trying to conserve runs about $20. If you expect to run a clothes dryer continuously, use electric blankets, cook with electricity, etc., you can expect to pay a bill considerably higher than this figure.

Electric clocks will not work properly. Automatic washers sometimes suffer from low water pressure, particularly in the summer and on the higher floors of apartment buildings. Portable cabinets and clothes closets are required since most apartments do not have either. You will find many Americans with used cabinets and closets for sale after you arrive.

Household goods, automobiles, personal effects, and radio receivers are not subject to duty if properly declared on arrival. (Incidentally, you cannot sell any property brought into Italy without customs payment unless the sale is to another American also entitled to duty-free importation of goods.) If you expect household goods after arriving in Naples, you must provide the U. S. Naval Support Activity (shipping and receiving officer) with your new address, delivery instructions and your command in Naples. On receipt of manifest information, the shipping and receiving officer will notify you as to what ship your goods are on and when they will arrive in Naples.

He will arrange customs clearances and deliver or store your goods as requested. Ship all of your household gear, but bring a large box or trunk with you containing coffee pot, sheets, blankets, towels, a few cooking utensils, air mattress, etc., so that you can camp out in your new apartment or house. Often household shipments take two or more months to arrive in Naples.

You may want to mail some items through the fleet post office to your new duty station. In this case, you should mark the package, "Post Office: Hold for Arrival," and address it to yourself at your new duty.

Automobiles—You are entitled to bring one automobile to Italy for the use of you and your family. This vehicle is imported into Italy free of duty and exempt from Italian road taxes (which could amount to $200 per year). This one car will be registered with your command and issued special license plates—AFSE plates for NATO personnel and "C" plates for personnel at U. S. commands. If you insist on becoming a two-car family, the operation of your second car will be at your expense, including Italian license tax, road fees and import duties.

Permission is required from the Commanding Officer, U. S. Naval Support Activity, before you may purchase or sell privately owned vehicles. Sale of vehicles shipped to Italy at the expense of the U. S. government is prohibited for a period of six months after arrival, and of course, cars cannot be sold to Italian nationals.

The purchase of a new automobile just before leaving the States is not recommended. If you have a comparatively new automobile and would incur a great loss by disposing of it, then bring it along. But before buying a new one, consider the fact that driving conditions in Naples are not as well regulated as

All-Navy Cartoon Contest
James R. Branum, CT1, USN



"Frankly, Johnson, I'm worried about you. You've been aboard three months and you haven't put in a chit for transfer yet."

WHAT'S IN A NAME

Tenth Ice Age for Glacier

Late this fall, when it's springtime in the southern hemisphere, the icebreaker *USS Glacier* (AGB 4) will begin her 10th consecutive season in Antarctica. She has been part of every Deep Freeze operation since her commissioning in 1955.

Glacier, the Navy's heaviest and most powerful icebreaker, is usually the last vessel to leave McMurdo Sound in the fall and often the first to return in the springtime.

As could be expected, liberty down south is a little skimpy. During last year's operation, Glacier's 100 days below the Antarctic Circle was uninterrupted except for a one-week stay at Hobart, Tasmania.



The icebreaker's first assignment upon reporting to Antarctica is to break a channel through the ice pack from the open sea to McMurdo. The 22-mile trip through the ice (which may be 15 feet thick) takes her about four weeks.

From December until March, Glacier undertakes a number of jobs in addition to keeping the channel clear.

Last season, for instance, she assisted in the recovery of a tractor which had fallen through the ice shelf at McMurdo Sound and into 24 feet of water. Maneuvering gently (as soundings are largely uncharted in this area), she broke the ice around the tractor so another ship, which was equipped with a 50-ton boom, could lift the vehicle from the icy waters.

Near the end of the season the icebreaker conducted a photographic-scientific survey of the Balleny Islands, just off the coast of Antarctica.

In March, when winter sets in, the ice grows too thick even for *Glacier* to break. She then proceeds to Boston, where she undergoes overhaul and her crew has liberty. She serves with the Atlantic Fleet until it's time to head south again.

in the states, and your new American car will be more accident prone in narrow streets and under congested, and often erratic, driving conditions. You will do better with a U. S. compact, or an American vehicle from two to five years old. Service facilities for American automobiles in Naples are below U. S. standards.

If you do not own a car, you can buy a U. S. car through the Navy Exchange at prices equal to, or below, those charged in the U. S. Foreign cars may be purchased, but shipment to the United States will be at your own expense.

Gasoline is available in Naples and throughout Italy by use of chit books purchased from the Navy Exchange. Not gallons here, but liters —at 3.78 liters per gallon. When chits are used the cost of gasoline is approximately 16 cents a gallon for high test and 12 cents for regular gasoline on the Italian market. Without the military discount, gasoline is about 60 cents a gallon.

Registration and Licenses—It is recommended that you do not obtain customs documents from any automobile club outside of Italy. The Motor Vehicle Office, NavSuppAct, will arrange for the documentation of your car with the Automobile Club of Italy wherein military personnel enjoy savings amounting to $125 through the use of military registration and military-issued license plates. To enjoy this privilege, your car must be registered in the name of the military member of the family, and you must have proof of car ownership such as a legal bill of sale or title, and proof of insurance.

Your stateside driver's license will not be valid. Instead, you must have a "U. S. Forces in Italy Motor Vehicle Operator's License."

Insurance—Personal liability insurance of $10,000 to $20,000 and property damage of $5000 is mandatory.

In case of an accident, if you have automobile liability insurance with an Italian company you are required to notify that company within 48 hours after the accident occurs. A failure to notify the company within that deadline can be justification for the company's refusal to accept liability.

Review your policies to determine the time limit in reporting accidents and comply strictly with the requirements set forth therein. To be fully protected, any sort of incident that might be considered an accident, should be reported. The time limit for motor scooters in reporting is often 24 hours. In addition, many policies do not extend coverage while the insured's vehicle is being operated by garage or parking lot attendants.

Civilian Clothes—Civilian clothes are encouraged for off-duty wear, and may be worn at work by officers assigned to NavSuppAct. The Navy Exchange has a fair variety but it is suggested that you bring some of your favorite brands of shoes, hose, suits and underwear.

You should bring galoshes, boots, coats and all-season hats, sweaters, suits, and dresses, depending on the extent of your social life. And bring your mail order catalog since it will probably be one of your favorite sources of resupply.

A little advance warning along the lines of clothing standards is in order. It is your responsibility to set an example of proper civilian attire and to insure that your dependents conform to the dictates of local good taste. The wearing of slacks, shorts, pedal pushers and halters in public places in Italy—other than beaches or similar recreation areas—is strongly discouraged. Those wearing this type of attire will be denied entry into buildings of the Navy Headquarters area.

What To Bring—Each uniform season begins the third Monday of the month as follows: Spring, April; summer, May; fall, September; winter, October. Uniforms worn during the appropriate seasons are:

Officers and chief petty officers—Service dress blue, service dress white, tropical white long.

Enlisted men, E1-E6—Dress and undress blue, dress and undress white, tropical white long (full seabag required).

Navy women—Service dress blue, service dress white, service dress light blue, working gray, (also, for nurses, indoor duty white).

Uniforms and articles for uniforms are available at the Navy Exchange.

Pets—Shipment of your pet to Naples is your responsibility. The Navy does not ship, or pay for shipment of pets to overseas duty stations except when travel is by ships of MSTS. At present, MSTS ships do not call at Mediterranean ports. If you are traveling commercially, arrangements for shipment of your pet are between you and the shipping company.

Clearing Customs—On landing in Naples, everyone is required to submit his baggage for customs inspection. Items such as radio transmitters and firearms will be impounded until the necessary permit is issued.

On arrival by plane or ship, hand baggage is taken to customs for inspection, where it is necessary for the owner to stand by with luggage keys and passport. On completion, cabin baggage must be removed from the port area by the owner immediately, otherwise additional customs inspection will be required. If baggage remains in the customs inspection room overnight, storage charges will accrue and must be paid before pickup.

Hold baggage will be offloaded by stevedores and assembled in an area close to the gangway. If you need your hold baggage immediately you must report to this area, properly identify and give receipt for baggage. It will then be removed to the customs inspection area by the "Espresso Bagaglio" and processed similarly to the cabin baggage.

Hold baggage which is not claimed will be removed from storage, cleared by the shipping and receiving officer and stored until delivery is requested. If you want to handle your hold baggage in this manner, you must provide the shipping and receiving officer (Room 23, NavSuppAct, Building "A") with deliv-

All-Navy Cartoon Contest
Robert E. Churchill, RDSA, USN



"What'cha mean, state tax!"

ery instructions before designated delivery date. If hold baggage must be transhipped to other sections of Europe, you must provide the shipping and receiving officer with eight copies of travel orders to have baggage transhipped at government expense.

Facilities and Services

Arrival—Your sponsor will meet you on arrival. Transportation is provided from the dock or airport to the hotel. In addition, a representative from the Navy Overseas Transportation Office meets all incoming personnel with dependents. Transportation is furnished to the barracks for Navy enlisted personnel assigned to NavSuppAct Naples who are without dependents. Navy personnel assigned to AFSouth will be provided transportation to AFSouth Post.

Military personnel should report and commence checking in within six hours of arrival, or if after working hours, by 0800 the following morning. (Entitlement to temporary lodging allowance for married personnel is based on the time of checking in to the command.)

Hotels and Pensiones—Families reporting to Naples usually live at a hotel or pensione (boarding house) while hunting for a permanent home. Hotels and pensiones are numerous and varied, luxurious and plain; expensive and inexpensive. Because Naples is a tourists' mecca, many of the hotels are completely booked from April to October. Advance reservations are suggested. Reservations may be made by communicating with your sponsor or through the NavSuppAct Overseas Transportation Officer.

Housing—The NavSuppAct has established a housing office to assist U. S. military personnel in renting housing. No government housing is available in Naples, and all Americans must rent apartments and homes "on the economy." Negotiations with property owners is a personal matter.

Types of Housing Available—Generally, private quarters will consist of flats in apartment buildings. In the suburban areas, individual houses may be rented.

Construction standards are different from those to which you are accustomed in the States. Usually

All-Novy Cartoon Contest
LCDR Billups E. Lodge, USN



"Sorry, Chief, I can't find anything in the regulations against Honsen's hanging his loundry out to dry."

floors are of tile or marble; parquet (wood) may be found in more expensive quarters.

The kitchens of unfurnished quarters are not provided with any appliances as in many stateside apartments. Closets are in very short supply and drape fixtures usually consist of small iron brackets mounted over the windows.

Central heating will be found in the more modern buildings, but this usually has to be supplemented by additional space heaters during cold spells.

Hot water is provided from gas or electric heaters in the apartment which usually will supply both the kitchen and bathrooms.

What You Will Pay—Several factors influence rentals, such as nearness to the sea, view and neighborhood. Current rentals in the three main residential areas for unfurnished quarters are from:

	Number of Bedrooms			
	1	2	3	4
Pasillipa	$70	$85	$100	$125-up
Vomero	65	70	80	100-up
Bagnali, Lucrino	45	60	70	85-up

Plus Italian Government tax at 3.3 per cent monthly

The rents of furnished quarters are subject to considerable variation according to the amount and quality of furnishings. As a guide, $20 to $30 monthly should be calculated over the unfurnished rental rates.

Utilities are not included in the rent. Tenants living in apartment buildings also pay for the janitor, for lighting and cleaning the hall and stairways, and other similar incidentals. The charges range from $3 to $20 monthly according to the size and type of apartment, and are normally included in the monthly rental in the standard lease.

The janitor or "portiere," as you will learn to call him, is not the building superintendant. He is responsible for cleaning those areas in common use, to ensure that unauthorized persons do not enter the building and to open and close the main doors at the established time which ranges from 0700 to 2100 on weekdays and 0700 to 2000 on Sundays and holidays.

It is not part of his job to run errands for the tenants, to mend leaking faucets or carry in the groceries. He will probably do all this, but will expect to be tipped.

Telephone—Telephone service to private quarters is controlled through a telephone office located at AFSouth. To avoid delays to key personnel, certain billets are designated for priority telephone service and personnel ordered to these billets receive telephone service shortly after arrival.

If you are not entitled to priority consideration you can expect to wait about six months to have service installed. After an initial installation fee of about $40, telephone charges are computed quarterly and are considerably less than you would expect to pay in the United States (about $3.00 per quarter for normal service).

Police Organizations—In Italy there are two principal police organizations; the Carabinieri Corps and the Public Security Administration. The Carabinieri Corps is part of the Army and has sole responsibility for military police functions of the Army, Navy and Air Force. It also performs functions of preventive (security) police and law enforcement (judiciary) police. In wartime, the Corps provides special combat units.

The Public Security Administrations operates under the Ministry of Interior.

In addition there are Customs police and local police, which are divided into traffic and tourist divisions.

As a U. S. citizen, your primary concern and contact will be with the

U. S. Navy Shore Patrol. The SP is called when you have a traffic accident, and the SP is authorized to stop, and ticket, you if necessary for violations of local traffic laws.

Financial Matters—The basic unit of Italian money is the lire, issued in paper currency or coins. There are coins of 5, 10, 20, 50, 100, and 500 lire; and notes of 500, 1000, 5000 and 10,000 denominations. At present there are 621 lire to the dollar.

Temporary Lodging Allowance—TLA starts the day after arrival. It is based on the number of your dependents on station and is paid for the absence of government quarters and messing until permanent quarters are obtained. To qualify, you must occupy a "hotel or hotel-like accommodations." This payment is a pay record credit and is collected on regular pay day. The TLA may last up to 60 days following arrival and 10 days before detachment. The actual cost is based on the local per diem allowance and ranges from about $22 per day for a family of five down to $14 for a man with only two dependents. However, be sure to check the current *Joint Travel Regulations* as these rates may change from time to time.

Cost of Living and Housing Allowance—An additional cost of living and housing allowance is paid to personnel stationed in Naples and living on the economy to offset higher living costs in the area. These payments are constantly reviewed and changed and presently equal about $1.50 daily for an average family.

Educational Facilities

Forrest Sherman School—The Navy operates both an elementary school and a high school in Naples. Bus transportation is provided from specified areas in the city to both schools. Textbooks and supplies are furnished by the school, with the exception of pens, pencils and notebooks. These may be purchased at the Navy Exchange Branch in the elementary school. The curriculum of the Sherman high school is accredited by the North Central Association of Colleges and Secondary Schools.

Munich Campus, University of Maryland—Dependents of U. S. military personnel are eligible to attend the Munich campus of the University of Maryland. This school provides a regular two-year junior college curriculum which is similar to that taught on the University's stateside campus.

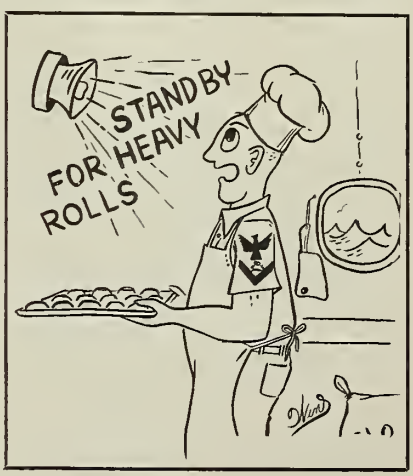
Kindergartens—There are a number of private kindergartens in the area. Generally, these are operated by wives of service personnel, some on a cooperative basis, but all at a relatively low cost. The AFSouth Post Kindergarten, sponsored by NATO wives, is popular and bus service is provided. Many small children are also enrolled in Italian kindergartens.

Adult Night Classes—By arrangements with the University of Maryland, off-duty evening classes are available throughout the year. These courses, taught at the Forrest Sherman High School, carry full resident credits of three semester hours each course.

Library—The library located in NavSuppAct, Building "A," is maintained for the convenience of American personnel in the area. A large selection of the latest fiction and non-fiction publications, as well as an extensive reference section, is maintained. These facilities are available to you and your family.

Language Classes—Italian is a comparatively easy language to master. Scaling the language barrier will help make your stay in Italy more interesting. The advantages of learning the Italian language are numerous. Even a slight knowledge of the language will be far better than none at all.

NavSuppAct and AFSouth Post sponsor Italian classes for beginning students and for intermediate and advanced classes. Classes are arranged for on-duty hours and off-duty hours; for military members alone, for dependents and for both.



The tuition fee for 10 weeks for dependents is 3500 lire. Instruction for U. S. military personel is free and mandatory for Navy personnel.

Civilian Employment—It is the policy of the Navy to use the services of local people as much as possible. With the exception of a few U. S. Civil Service positions, employees are paid in accordance with the Italian wage scale. Job opportunities are extremely scarce. Consequently, dependents should not anticipate finding work here.

Medical Services—The NavSuppAct Station Hospital is located at 54, Via Manzoni, Naples, near the Navy Headquarters area, and across the street from the Forrest Sherman Elementary School.

Eighty beds and 12 bassinets provide in-patient care. Limited laboratory service is available.

The out-patient clinic is located on the main floor of the station hospital.

Optometry service is available to U.S. military personnel and their dependents. All refractions are by appointment only. Military personnel from ships and Fleet units are given priority over shore-based personnel and dependents. Eyeglasses are furnished at no cost to authorized military personnel, but dependents must buy eyeglasses, at their own expense, from Italian opticians available in the area, or the Navy Exchange Optical Shop.

Dental—The Dental Department of the Naval Support Activity is perhaps the most modern and best equipped clinic on the continent.

This clinic primarily renders first aid treatment to dependents, but is also available to determine dental needs and the examining dental officer will plan your treatment and make appointments for necessary dental work.

Dental accidents are quite prevalent here. Your homes will have mostly marble, tile or terrazzo floors. These are dangerous for running children or for children playing on the floor.

Enlisted Men's Club—The Navy enlisted men's club, the Bluebird Club, is located in downtown Naples and is operated by the Navy Exchange. The club is open to all military enlisted personnel, E6 and below, and to their authorized guests. The club

facilities include bar, restaurant, game machines and package store.

Officers' Club—The Allied Officers' Club at AFSouth Post provides a varied assortment of services and recreation facilities for all U. S. military officers and their guests.

Flamingo Allied Enlisted Men's Club—The Flamingo Club located at AFSouth Post is an international club for all allied enlisted personnel. Club facilities include a restaurant, ballroom, stag bar, piano bar and game room.

USO Club—The USO is located at 10 Calata San Marco, adjacent to the Bluebird Club, and a three-minute walk from Fleet landing. Facilities include an information center, coffee bar, lounge, check room, game room, showers and washrooms, and a writing room.

Assistance is given in securing hotel reservations, general information and personal service.

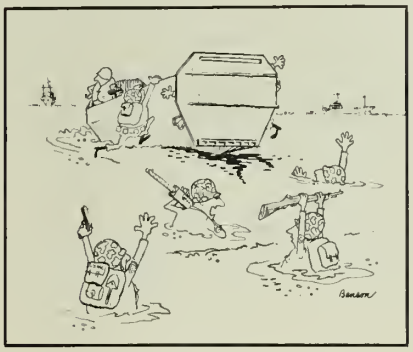
United Seamen's Service Club—This club is located at Via Acton 18, a short walk from Fleet landing. It is open to all military personnel. Facilities include reading and writing rooms, billiard and ping-pong tables, and a small souvenir store. Beer, soft drinks and food are also for sale at reasonable prices.

Christian Servicemen's Center—This center is located at Piazza Vittoria 6. There are lockers, games, reading and writing tables and a snack bar.

Opera—This is a music-lovers' paradise. Opera and concert seasons are excellent. Opera season runs from the latter part of November until the first of June. There are a few night clubs with floor shows, but they are very expensive, even by New York standards. (A beer may cost two dollars.) Most have a cover charge or minimum. Most local Americans stand clear of the night clubs.

Shopping Facilities—Shops and department stores in Naples carry a diversified stock of consumer items, but in most cases one cannot expect to find his favorite stateside brands. In smaller shops, bargaining is the accepted method of doing business, and the purchase of more than one item usually entitles the buyer to a further discount. However, in the department stores prices are fixed. Charge accounts are rare, and when you buy on terms, expect to pay a real premium in interest for the credit. The return of merchandise is not permitted in most Italian stores.

All-Navy Cartoon Contest
Robert J. Bensan, DMSA, USN



"Who put that blasted eight-to-four-thirty desk jockey at the helm?"

Commissary Store—This is a new self-service, supermarket store located in the Agnano district of Bagnoli. It provides American and approved foreign goods to authorized military purchasers.

Navy Exchange—This store can be compared to the larger stateside military exchanges. The new, air-conditioned store carries a wide range of U. S. and foreign merchandise. It also houses an optical shop, uniform shop, clothing store, snack bar, watch repair shop, barber shop, and appliance service center.

Chaplains and Religious Services—The religious activities of the U. S. Armed Forces in Naples are directed by the chaplains of NAVSUPPACT. Both Catholic and Protestant chaplains are available. All chaplains are available for consultations on religious, moral, economic, marital, personal or other types of problems. Interviews are scheduled by appointment, as are arrangements for weddings and baptisms.

WHAT'S IN A NAME

World's Largest College Dormitory

The world's largest college dormitory is undergoing the last stages of a repair and renavation project that will leave her as sturdy as the Navymen who have walked her passageways for almost 60 years.

Bancroft Hall, the big old dormitory building which quarters midshipmen at the Naval Academy at Annapalis, is having her three miles of corridars and 24 acres of deck space completely refurbished under a six-year remodeling program.

Now nearing completion, the project has given the historic building a fresh. clean appearance. Project planners have been careful, however, not to splash paint on the walls of tradition.

Named for George Bancroft, the Secretary af the Navy who founded the Academy, Bancroft Hall began rising at Annapolis in 1898.



Over the years, it has been a prominent landmark, compelling the attention of visitars and midshipment alike.

The big darm has all the facilities needed for 4000 midshipmen. The cavernous basements contain six galleys, four barber shops, a store, cobbler shop, tailar shop, dispensary with complete dental facilities, and post office. For recreation, the Hall has a bowling alley, rifle and pistol ranges, music rooms, radio stations, recreatian halls, reception rooms, and soda fountain.

However, complete as their home has been, midshipmen constantly outgrew Bancroft Hall. Originally a two-wing structure, the dorm became so crowded by 1920 that two more wings were added. In 1941, another two wings were built.

Ten years ago, as the Academy approached the 4000 enrollment mark, the dorm facilities again required more elbow room. What's more, after 50 years of service the effects of age, changing standards of American life, and hard usage by midshipmen were woefully apparent. Complete interior reconstruction was called for, including new plumbing, lighting, wall surfaces, floor covering, and furnishings.

After a thorough engineering study, constuction got underway in 1961.

Completion of all interior renovation is now near at hand, and only the cleaning and painting of exterior masonry surfaces will remain.

By next January, it is planned, the job will have been completed.

Navy's 'Selected Reserve'—It Has a Sharp Training Program

TAKE A COUPLE of DDs or DEs, add a Fleet submarine, some patrol planes and a few helicopters; then blend carefully with several hundred Selected Reservists and you have most of the ingredients for a Navy Reserve ASW exercise.

Such operations are being carried out by Reservists from Maine to Florida, from Seattle, Wash., to San Diego, Calif., and along the Gulf Coast.

Reservists from Thirteenth Naval District's Puget Sound area are a recent example. Members of the Reserve crews of USS *Whitehurst* (DE 634) and USS *Charles E. Brannon* (DE 446) sailed from Seattle's Naval Supply Depot. A contingent of Submarine Reservists boarded USS *Medregal* (SS 480) at Port Angeles. Naval Air Reservists, flying fixed-wing patrol planes and helicopters of VS-892 and HS-891 from NAS Seattle, took off from Sand Point.

These Reservists took part in a joint training exercise which emphasized antisubmarine hunting and killing procedures, and used combined surface and air units. Training in search and rescue and coastal patrolling was also included.

These exercises are conducted periodically to maintain the readiness of Reservists.

JUST HOW READY is the Naval Reserve? Let's take a look at today's Selected Reserve program.

The Selected Reserve was established early in 1958. The new concept was designed to provide those forces which would be needed immediately at the outbreak of hostilities involving the United States.

Reservists assigned to the Selected Reserve were issued pre-cut orders to active duty. They were expected to report for active duty in a matter of hours, without reliance on public transportation. They had to live within commuting distance for weekend drills.

Today's Selected Reserve has five components:

- ASW Component, consisting of 13 destroyers and 27 destroyer escorts manned by nucleus crews and ASW Reserve crews, and 83 ASW Air Reserve squadrons.
- Mine Warfare Component, consisting of 12 minesweepers, manned by 76 officers and 372 enlisted men who make up the "Blue" crews.

These two priority programs account for about seven-and-one-half per cent of the Selected Reserve. Reservists drill one weekend a month and serve their ACDUTRA as a team on board their ships.

Fleet and Type commanders assumed the responsibility for maintenance of ASW ships in 1962; maintenance of minecraft is scheduled to be turned over to Atlantic and Pacific Fleet type commanders shortly.

The missions of the ASW and Mine Warfare components are to provide ships and trained personnel capable of immediate deployment.

- Fleet Augmentation component, comprising about 77 per cent of the Selected Reserve. It provides trained personnel for immediate active duty to raise the manning level of afloat Fleet units to wartime complement. Most Reservists in this component drill one night a week or one weekend a month; their ACDUTRA is normally performed in the type of ship to which they would be ordered on D-day.

This component includes the "Gold Crew" of the Mine Warfare program, and Selected Air Reserve units. It also includes the Surface Program (Surface and Fleet divisions), the Hospital Corps, MSTS, and Naval Control of Shipping Organization programs. The Submarine program, in which about 240 officers and 2700 enlisted men take part regularly, is also a part of this component. Various staffs round out the Fleet Augmentation component.

The fourth and fifth components make up about 15 per cent of the Selected Reserve. Within these components are personnel with a great variety of special skills which, in time of mobilization, will be required to meet the manpower needs of Fleet activities and shore establishments. They are:

- Fleet Support Activities Component, which includes Air Reserve maintenance units and the Advance Base Command, Amphibious Beach Group, Construction Battalion, Inshore Undersea Warfare (formerly Harbor Defense), Ship Activation, Maintenance and Repair, and Ship's Supply Officer programs.
- Shore Establishment component, which includes BuWeps units and the Communications, Intelligence, Mobilization Team, Naval Security Group, Recruit Training (Wave), Selective Service, Telecommunications Censorship, and Transportation, Traffic and Terminal Management programs.

THE COMMANDER, Naval Reserve Training Command, with headquarters in Omaha, Nebr., oversees the training of more than 94,000 Selected Reservists, working through the naval district commandants. The Chief of Naval Air Reserve Training, headquartered at NAS Glenview, Ill., supervises the training of Selected Air Reservists.

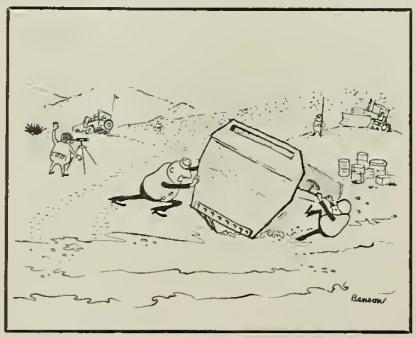
There are more than 300 Naval Reserve training centers and training facilities and 139 electronics facilities established in major population centers. Air Reserve squadrons are based at nearly a score of naval air stations or Naval Air Reserve training units (NARTUs) throughout the country.

Some training centers are located near available pier space where training ships and submarines can be moored, thereby making dockside training readily available during the periods when Reserve training ships are in port.

There are 87 Naval Reserve training ships; in addition to the 40 destroyer-type ships and 13 minecraft, there are 23 immobilized submarines and 11 patrol craft. The patrol craft are, for the most part, located in the Great Lakes.

The Naval Reserve's mobilization needs are measured in terms of ships, aircraft and trained and qualified personnel. The present strength in

All-Navy Cartoon Contest
Robert J. Benson, DMSA, USN



"Our Amphib School instructors never mentioned this!"

drill pay status in the Selected Reserve—both Surface and Air—is about 119,000; it is steadily increasing. The authorized strength is 126,000 in drill pay status.

THE SELECTED Reserve concept proved its effectiveness in 1961 during the Berlin crisis. Forty Selected Reserve ships and 18 Selected Air Reserve squadrons joined the Navy's operational forces as a result of the partial mobilization. This call-up involved 867 officers and 5519 enlisted Reservists.

In August 1962, these ships and squadrons were released to inactive duty and resumed their task of training Reservists.

The Naval Reserve is currently acquiring more modern replacement ships and aircraft. Six modernized destroyers reported last October, five more ships reported in April. Eventually, the Reserve expects to have 36 FRAM (Fleet Rehabilitated and Modernized) destroyers. These replacements, with their improved sonar, radar, and up-to-date communications equipment, will greatly improve the readiness of the ASW Reserve forces.

Active duty for training (ACDUTRA) is considered an indispensable part of every Reservist's training. The time devoted to gaining on-the-job experience in shipboard skills during the annual two-weeks' ACDUTRA is approximately equivalent to a year's training time spent at a training center. Through a planned succession of ACDUTRA periods, Reservists keep proficient in their current mobilization assignment and are progressively trained for increased and broader responsibilities.

During the past fiscal year, the Reserve launched the largest program of Class "A" or Apprentice School training in its history. This is one of the most significant improvements in training that has occurred in several years. The Class "A" school program—whereby a man reports to school en route to his two-year active duty tour—will send to the Fleet much larger numbers of Reservists who have completed the technical training provided by a Class "A" school. The Naval Reserve now furnishes approximately 25,000 men, or 21 per cent, of the annual active duty input to the Fleet. Under this school program, one of every five Reservists should report to his first duty station as a Class "A" school graduate.

All-Navy Cartoon Contest
Herbert F. Clarke, Sr., CS2, USN



"Cancel that order of spuds!"

SINCE LAST August, the Reserve has been employing a program. known as "Operation Return," to increase petty officer strength. Under this program, records of ex-Navy and Naval Reserve enlisted men, which are maintained at the Military Personnel Records Center at St. Louis, Mo., are screened to provide a pool of qualified Naval Reserve prospects. There are hundreds of thousands of records on file at St. Louis of men discharged in recent years. This project will make use of this source of trained Navy veterans who have completed their military obligation.

More team and practical training, designed to appeal to the petty officer, has been instituted. The Reserve is encouraging unit cruising, which has proved to be an effective training measure as well as a strong morale builder.

RADM F. J. Becton, USN, Commander Naval Reserve Training Command, sums it all up rather nicely: "Training in the Naval Reserve falls into three distinct phases. These are: Pre-active duty, active duty, and post-active duty. The personal experience of each Reservist during these three phases of his initial enlistment is a determining factor in whether or not he is motivated toward a career in the Naval Reserve. Through effective leadership and the intelligent application of sound management principles at all command levels, we encourage our Reservists toward a career in the Naval Reserve. Our Selected Reservists develop a sense of satisfaction in being an important part of the Navy's defense team.

"The quality of training in the Reserve has improved. We find that more drilling Reservists are now passing the petty officer examinations with higher average grades.

"Our Naval Reserve was tested in October 1961. Our reservists and their planes and ships performed well. If needed again they will be ready to answer the call."

Navy Wives Squared Away

Training Squadron Three is expected to train not only naval aviators but newly assigned members of its ground crew. However, the unit extended itself beyond the call of duty some weeks ago and a group of Navy wives were included in the indoctrination program.

Each wife was issued a set of orders which detached her from duties such as washing, ironing and housekeeping, and ordered her to report to TraRon Three for training. A syllabus was prepared which stressed the importance of their husbands' jobs and the mission of the training squadron. Included were lectures, tours and demonstrations.

First on their schedule was a lecture by the squadron's medical officer, who spoke on the ways a pilot's wife could prevent accidents by mentally and physically preparing her husband for his job.

Next stop was the Link training department, where the ground training devices were explained and each wife was given a ride in a sham aircraft.

They were then given a demonstration of pilots' survival gear and, evidently unable to resist the temptation, the women modeled the mae wests and tried out the life rafts.

Later in the day they witnessed a special banner takeoff and drop, watched air operations from South Whiting Tower, and were given a demonstration of the T-28 *Trojan*, which had been placed on jacks so the guests could watch all systems in operation.

At the conclusion of the tour every wife received a diploma and returned home, where she presumably resumed more normal duties: washing, ironing and housekeeping. But during the indoctrination program a good time as they say, was had by all. They expect to be back.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of currrent Alnavs as well as current BuPers Instructians, BuPers Notices, and SecNav Instructions that apply ta most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this sectian.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Natices apply to all ships and stations.

Alnavs

No. 10—Pertained to the Comptroller General's ruling concerning Family Separation Allowance.

No. 11—Announced the convening of selection boards to recommend officers in the grade of captain on active duty (except TARs) for promotion to the grade of rear admiral.

No. 12—Announced endorsement by the President and the bi-partisan leadership of Congress for the voluntary fund-raising campaign to support the establishment of the John F. Kennedy Library as a national memorial to the late president.

No. 13—Discussed the views of the Secretary of the Navy in regard to the process of selection of officers for flag rank.

No. 14—Further discussed details of the John F. Kennedy National Library Memorial Fund Drive.

Instructions

No. 2200.1—Established policy and guidance for certifying and requalifying cryptographic maintenance personnel.

No. 7010.2B—Revises the method by which the Chief of Naval Personnel levies an assessment against profits generated by the Navy Exchanges.

Notices

No. 1520 (27 April)—Invited eligible officers to apply for UDT/SEAL training.

No. 1650 (27 April)—Provided instructions for the requisition and distribution of the Antarctica Service Medal and attachments, currently available for initial issue to eligible personnel.

No. 7220 (28 April)—Discussed policy concerning multiple payments of incentive pay.

No. 3700 (1 May)—Provided information concerning permanent duty involving flying status for Naval Aviation Observers.

No. 1700 (5 May)—Announced the reprint (as NavPers 15885-B) of the December 1963 issue of ALL HANDS containing a comprehensive report on Rights and Benefits of Navymen and their dependents.

No. 1300 (13 May)—Emphasized the importance of interviewing personnel before their transfer to overseas duty.

No. 1418 (13 May)—Announced the schedule for Navy-wide examinations for enlisted personnel to be held July/August (Series 36).

No. 1306 (15 May)—Announced the sea duty commencement cutoff dates which establish the eligibility of enlisted personnel for Seavey Segment 3-64.

No. 1742 (18 May)—Described the Navy's voting program and directs attention to the citizenship and voting responsibilities of Navy personnel in the 1964 elections.

No. 1221 (25 May)—Announced the application of the Source Rating concept to the NEC system, provided information concerning NavPers 15105G, and authorized certain lateral rating conversions.

No. 1440 (28 May)—Directed the automatic change in rating of all Missile Technicians (MT) trained in the Surface Missile Systems program to Fire Control Technicians (FT).

No. 1221 (25 May) Announced the application of the Source Rating concept to the NEC system, provided information concerning NavPers 15105G, and authorized certain lateral rating conversions.

No. 1440 (28 May)—Discussed details of the surface missile systems missile technician (MT) conversion program.

No. 1710 (4 June)—Advised that the 1964 CISM Sea Week competitions had been canceled.

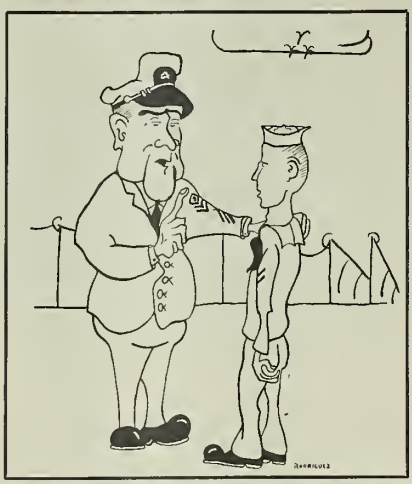
No. 1306 (5 June)—Announced an advance change to the *Transfer Manual* concerning personnel reporting for new construction detail.

No. 1510 (5 June)—Standardized the Aircrewman Certificate, NavPers Form 4044 (New 2-64), presented to all personnel who qualify and are designated as aircrewman.

No. 1650 (9 June)—Provided instructions for the requisition and distribution of the Armed Forces Expeditionary Medal for Lebanon and Vietnam areas of operation which is now available for initial distribution.

No. 1120 (19 June)—Announced the selection of personnel for training leading to appointment in the grade of ensign in the unrestricted line or staff corps (USN) and for temporary appointment in the grade of ensign or lieutenant (junior grade) for limited duty only.

All-Navy Cartoon Contest
S. R. Rodriguez, RMSN, USN



"Naw if there is onything you wont thot we don't hove, just osk me and I'll show you how ta get olang without it."

• CLASS "E" MESSAGES—You will receive Class "E" messages—personal telegrams from home, relayed through naval communications circuits—quicker and more reliably if they are addressed correctly.

Many messages are addressed incorrectly. This causes headaches for communicators, and lessens your chances for good service. It can also mean increased commercial charges to the sender.

To avoid this, you should notify your family of the proper way to send you a message when you are overseas.

If you're afloat or at an overseas location in the Pacific a telegram directed to you should include your name, rate, unit, and address as follows:

Jahn J. Doe, QM3
***USS Neversoil* (DD 1SSS)**
(ar Navy number)
c/o U. S. Naval Cammunicatian Statian
San Francisca
Stockton, Calif.

If you're afloat or at an overseas location in the Atlantic or Mediterranean, the same information is required, except that the address should be:

c/o U. S. Naval Communication Station
Washington, D. C.

Remember, it's for your benefit.

DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ KIRKPATRICK, Charles C., RADM, USN, for service as Superintendent of the U. S. Naval Academy from 14 Aug 1962 to 11 Jan 1964. By personal example, he served to inspire, motivate, and bring out the best in the midshipmen, resulting in the retention of a greater number of students for naval careers. He was responsible for major changes in curriculum which provide for greater freedom of course selection to avoid duplication of education and training and to meet the needs of the gifted students with special interests. One of his special projects, the Trident Scholar Program, provides incentive and opportunities for talented students to enter various fields of scientific research, improving their cabilities as future naval officers in these fields. In addition, RADM Kirkpatrick was instrumental in converting the Moreell Commission Plan, a long-range master plan for the future development of Academy facilities, into one which was acceptable to the Departments of Navy and Defense.



LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the government of the United States . . ."

★ BEDELL, Porter F., CAPT, USN, for exceptionally meritorious conduct in the performance of outstanding service from July 1961 to June 1964 as Commanding Officer of the U. S. Naval Air Station, Pensacola, Fla. Exercising exceptional leadership, professional competence, and industry in the fields of military management and community relations, CAPT Bedell markedly improved the operational readiness of his command and enhanced the prestige and objectives of the U. S. Navy within the local community. His sound judgment, keen foresight, and inspiring devotion to duty reflect great credit upon himself and upon the U. S. Naval Service.

★ BUCHANAN, Charles A., RADM, USN, for services from January 1962 to May 1964 as Commander Hawaiian Sea Frontier; Commandant, 14th Naval District; and Commander, U. S. Naval Base, Pearl Harbor. In his capacity as Commander Task Force 130 (the Project *Mercury* Recovery Force in the Pacific), RADM Buchanan was responsible for the planning, organization, development, and command of the astronaut recovery organization in the Pacific Ocean areas. By his tireless personal and active participation in the operations, he assured the successful recovery operations of CDR Walter M. Schirra, Jr., USN, and his space capsule *Sigma* 7 on 3 Oct 1962; and of Major Leroy G. Cooper, USAF, and his space capsule *Faith 7*.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ CAUSEY, Rex E., ET3, USN, for heroic conduct on 1 Mar 1964 while serving at the U. S. Naval Facility, Pacific Beach, Wash. When a shipmate became stranded on a piling in the middle of the Moclips River after he and the log he was standing on were suddenly swept from shore by a large wave, Causey, who was alerted to the situation at the Naval Facility, proceeded to the scene and, in company with his commanding officer, ventured out on the river in a small dinghy in an attempt to effect a rescue. Despite strong winds, high breakers, and floating debris, including swift-moving logs which threatened to capsize the small craft at any moment, Causey acted calmly, quickly, and efficiently in carrying out instructions, rendering vital assistance in the successful rescue of his shipmate who undoubtedly would have been washed out to sea and lost.

★ HETRICK, Albert M., Jr., HM2, USN, for heroism on the night of 4 Nov 1963 in effecting the rescue of a man who had leaped from the Motor Vessel *San Diego* while entering the slip in San Diego, Calif. Hearing cries of "man overboard," Hetrick rushed to the stern of the ferry, plunged into the dark and treacherous waters, and swam a distance of approximately 100 feet to reach the victim, who was being swept seaward by the current. Although pulled under the water several times by the struggling man, Hetrick succeeded in towing him to a boat which had been lowered from the ferry. Through his prompt and courageous actions in the face of grave personal risk, he was directly responsible for saving a life.

★ PETERSON, William A., AA, USN, for heroism on the night of 28 Dec 1963 while serving at the U. S. Naval Air Station, Glynco, Ga. Observing smoke and flames emanating from a nearby residence, Peterson rushed to the scene, forced his way into the burning structure through a bedroom window, and succeeded in rescuing three children and their father, the latter having been overcome by smoke while attempting to rescue his children. By his outstanding courage, promptness, and perseverance in the face of grave personal risk, Peterson was directly responsible for preventing any loss of life in the fire-engulfed home.

★ SHIELDS, William B., LCDR, USN, for heroic conduct on 1 Mar 1964 while serving as Commanding Officer, U. S. Naval Facility, Pacific Beach, Wash. When a crew member of the Naval Facility became stranded on a piling in the middle of the Moclips River after he and the log he was standing on were suddenly swept from shore by a large wave, LCDR Shields, who was alerted to the situation at the Naval Facility, proceeded to the scene and, in company with another of his crew, ventured out on the river in a small dinghy in an attempt to effect a rescue. Despite strong winds, high breakers, and floating debris, including swift-moving logs which threatened to capsize the small craft at any moment, he succeeded in rescuing the tiring victim who undoubtedly would have been washed out to sea and lost.

★ SIEFERT, Jerry R., CAPT, USN, for heroism in saving a woman bather from drowning in the treacherous waters at Barefoot Mailman Beach, Pompano Beach, Fla., on Christmas Day, 1962. Upon learning that four persons were experiencing difficulty in the heavy seas approximately 100 yards offshore, CAPT Siefert, who was engaged in attempting to salvage ancient relics from a sunken ship near the shore, immediately plunged into the turbulent waters and swam to the scene in order to render assistance. Despite the fierce undertow and crushing breakers, he managed to effect the rescue of one of the victims, a woman, after an exhaustive struggle. His actions were in keeping with the highest traditions of the Naval Service.

TAFFRAIL TALK

FEELING MYSTICAL? We're not either at the moment but the fate of Theodore J. Makowski, SR, causes us to wonder just a little. Nor are we given, normally, to exclaiming in amazement at the strange coincidence bit, but again, this guy Makowski. . .

Just like any other Navyman, he has a service number—but with a difference—777 77 77.

The Naval Training Center at San Diego says the odds on receiving a number such as this are one in every 1,111,111 but, although we are admittedly shaky in figuring out such things, we're not so sure. Seems much higher to us. How about once in every 7,777,777 times?

★ ★ ★

Do statistics interest you? Our editor in charge of figures (of all kinds) reports the following, direct from the Fleet: The refrigerated stores ship USS *Graffias* (AF 29) announces that on deployment it carried enough hot dogs to form a 22-mile long link of America's picnic favorite.

Not impressed? Consider the ship's inventory of bacon and eggs—enough, it is said, to set up a breakfast for everyone in San Francisco.

Such a food-stocking capability is a most desirable asset for a ship which happens to remain on deployment for any length of time.

Graffias overstayed the normal five-month tour for an AF operating with WestPac by something like 2920 days—eight years to be exact. But with the cargo she carried, it's apparent that she did not overstay her welcome.

Now, with 'Frisco her new home port, *Graffias'* business of supplying food to the fighting ships at sea may fall off for a while. But *Graffias'* crew is still statistics-minded.

They bet their ship's tour set a WestPac record for an AF.

★ ★ ★

A sign at the entrance to a certain naval dispensary, which describes what to do in case of an emergency goes into lengthy details concerning where a hospital corpsman might be found, how to contact him and what to do until he arrives. Then it concludes:

"If you have had time to read these instructions, your case is not an emergency. Come back tomorrow."

★ ★ ★

As it must to all good Navymen, Shorvey finally came to Dan Kasperick, senior military staff member of ALL HANDS. As you read this, Dan and family will be en route to Hawaii, where he joins the staff of CINCPACFLT. ALL HANDS readers will recall Dan's by-line during recent years of his penetrating analyses of such subjects as Seavey-Shorvey, pro-pay and the Settle report.

Each time an ALL HANDS staff member moves to a new billet, we who are left have the feeling that no one can quite take his place. Perhaps so, but if anyone can fill Dan's shoes, John Ramsey, JO1, USN, is just the man to do so. A native of Glendale, Calif., he's been around (primarily in the Pacific) during his eight years with the Navy. His ports of call have included, among others, Subic Bay, CINCPACFLT, San Diego and Saigon.

When Shorvey goes into operation, so must Seavey. Ramsey's preceding assignment was USS *Kitty Hawk* (CVA 63).

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at hame and overseas, capable af strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this cantral that aur cauntry's gloriaus future depends. The United States Navy exists to make it sa.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage fram the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect af our country, aur shipmates, and aur families. Our responsibilities sober us; aur adversities strengthen us.

Service to God and Country is our special privilege. We serve with hanar.

The Future of the Navy

The Navy will always employ new weapans, new techniques and greater power ta protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mability, surprise, dispersal and offensive power are the keynotes of the new Navy. The raots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our apportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrans and other sources. All material received is carefully considered far publication.

Here are a few suggestions for preparing and submitting material:

There's a good stary in every job that's being performed, whether it's an a nuclear carrier, a tugbaat, in the submarine service ar in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories abaut routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding ta a story.

Articles abaut new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel an liberty ar during leisure haurs, and humorous and interesting feature subjects are all of interest.

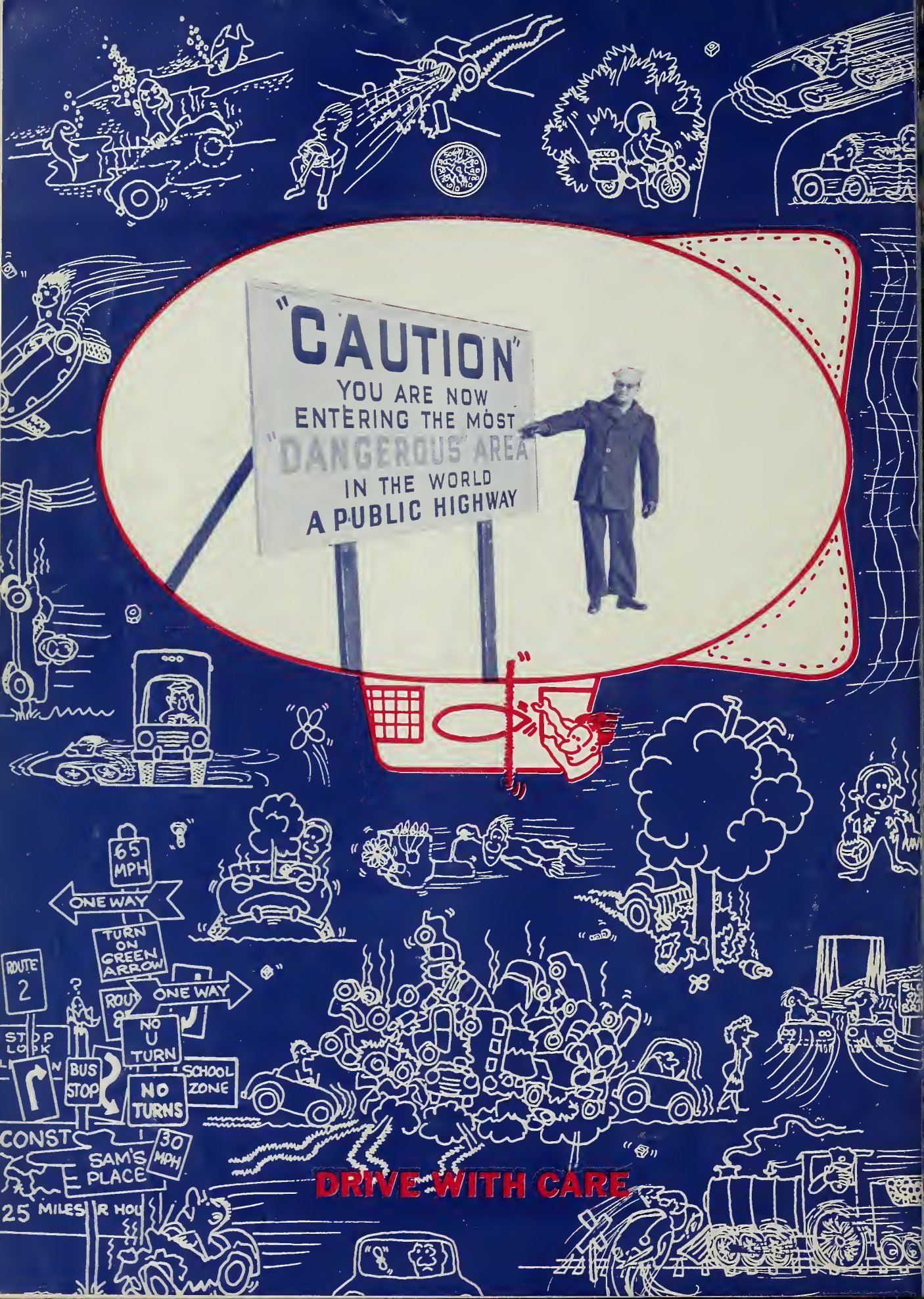
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Address material to Editar, ALL HANDS, 1809 Arlingtan Annex, Navy Department, Washingtan, D.C. 20370.

• **AT RIGHT:** AND SEE THE WORLD—Lloyd H. Jones, PH3, USN, photographs the Unisphere, symbol of the 1964-65 World's Fair in New York, to show his shipmotes and his folks bock home.




"CAUTION"
YOU ARE NOW
ENTERING THE MOST
"DANGEROUS" AREA
IN THE WORLD
A PUBLIC HIGHWAY
65 MPH
ONE WAY
TURN ON GREEN ARROW
ROUTE 2
ONE WAY
NO U TURN
BUS STOP
NO TURNS
SCHOOL ZONE
CONST
SAM'S PLACE
30 MPH
25 MILES R HOU
DRIVE WITH CARE

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

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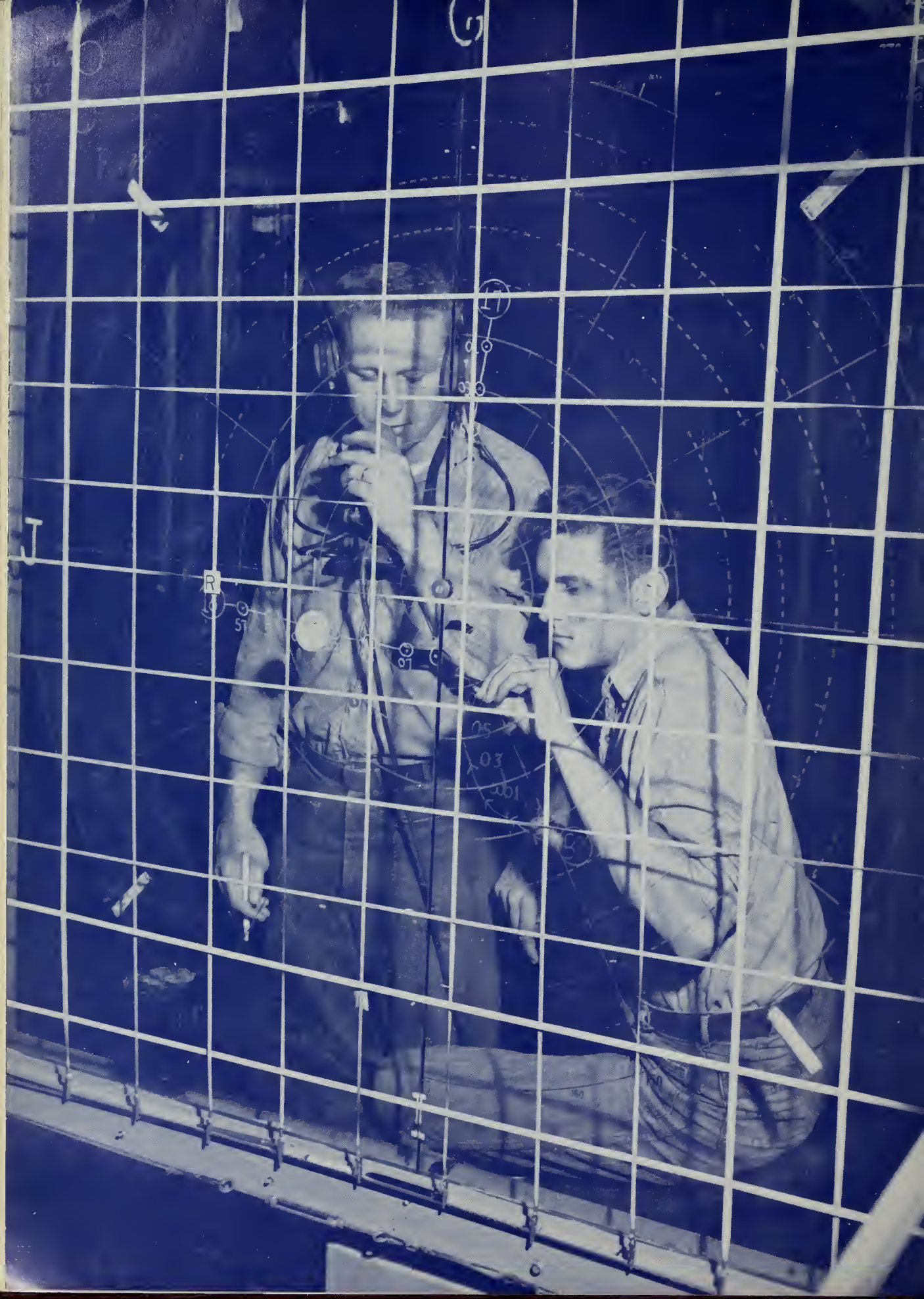
in this issue:
U.S. NAVY
IN VIETNAM



This magazine is intended for 10 readers. All should see it as soon as possible. PASS COPY ALONG

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SEPTEMBER 1964



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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

SEPTEMBER 1964 Nav-Pers-O NUMBER 572

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The Chief of Naval Personnel

REAR ADMIRAL J. O. COBB, USN
The Deputy Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistant Chief for Morale Services

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John A. Oudine, **Editor**

Associate Editors
G. Vern Blasdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

• **FRONT COVER:** SENTINELS OF THE SEA—Maintaining on around-the-clock watch, and ready to sail anywhere on the seven seas, Navy ships are a bulwark of the free world. Here, a *Terrier* missile mount an a cruiser guards the skies over an aircraft carrier.

• **AT LEFT:** BOARD WORK—Canstant training keeps our Fleet forces at the peak of readiness. Here, crew members in *USS Midway* (CVA 41) maintain vertical plot in cambat information center during exercises in the Pacific.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.





ON PATROL—*USS Turner Joy* was one of first ships on scene. *Below: USS Ticonderoga* provided air cover.



Navy

Events involving Fleet units in the vicinity of Vietnam were unfolding rapidly, but the situation was well in hand when ALL HANDS *went to press. These events have been widely reported by news media. Following is a report on the situation as it stood late last month.*

TORPEDO ATTACKS against two Navy destroyers patrolling in the Gulf of Tonkin off North Vietnam point up the way "readiness" enables Seventh Fleet units to deal with unexpected situations in the world's hot spots.

Three details of the first incident that developed in the pre-dawn hours of 2 Aug 1964, when USS *Maddox* (DD 731) was attacked, are especially notable:

- Neither *Maddox* nor her crew sustained damage or injuries during the surprise attack by three high-speed PT boats;
- *Maddox* gun crews demonstrated how effectively they could repulse such an attack;
- Carrier-based jet fighter aircraft were at the scene within minutes, counter-attacking the PT boats from the air.

These are all examples of why Readiness has become the password and motto of the Seventh Fleet.

The first encounter took place in international waters in the Gulf of





A READY GROUP—*Crusaders* like these blasted PTs attacking *USS Maddox* (DD 731) *right* in international waters.

On Guard in the Pacific

Tonkin, about 30 miles from the coast of North Vietnam, as *Maddox* was conducting a routine patrol. It marked the first shooting conflict involving a U. S. Navy warship since the close of the Korean fighting.

FOLLOWING is a chronology of the incident:

• 2300 1 August: *Maddox* reported observing an estimated 75 junks near her assigned patrol area off North Vietnam. She reported changing her course to avoid the junk concentration and indicated there was no evidence of any hostility.

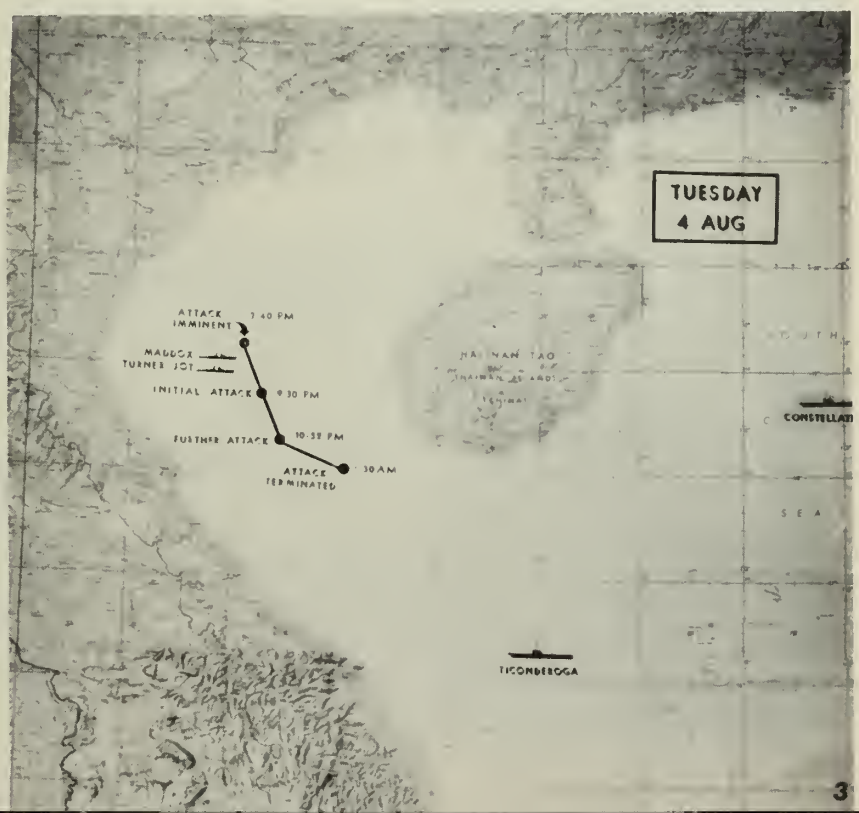
• 0130 2 August: *Maddox* reported that three torpedo boats were on a southerly course, heading toward the ship at extreme range (over 10 miles). *Maddox*, at this point, was about 30 miles from the coast.

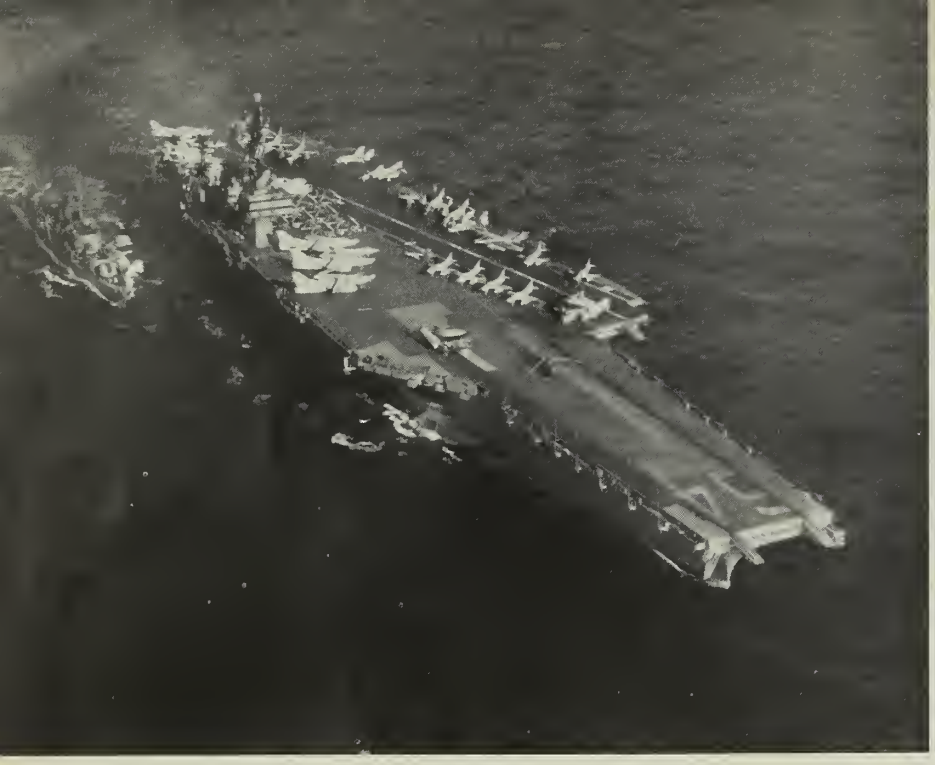
• 0340 2 August: *Maddox* reported she was being approached by the high-speed (estimated 45- to 50-knot) craft, whose apparent intention was to conduct a torpedo attack, and that she intended to open fire in self-defense if necessary.

• 0408 2 August: *Maddox* reported she was being attacked by the three PT craft. She opened fire with her five-inch battery after three warning shots failed to slow the attackers.

• 0408 2 August. The PTs continued their maneuvers and two of the PTs closed to 5000 yards, each firing one torpedo. *Maddox* changed course in an evasive move and the two torpedoes passed close aboard on the starboard side (100 to 200 yards).

USS *Ticonderoga* (CVA 14) advised she was sending four already airborne F-8E *Crusaders* with rockets and 20mm ammunition to provide air cover for *Maddox*. The pilots were instructed not to fire unless







TEAM MATE—Planes of *USS Constellation* (CVA 64) and *Ticonderoga* flew 64 sorties against PT boats and bases.



ADM Thomas H. Moorer, USN
CINCPACFLT

VADM Roy L. Johnson, USN
COMSEVENTHFLT



Maddox or the aircraft were fired upon.

• 0421 2 August: The third PT moved up to the beam of *Maddox* and received a direct hit by a five-inch round and, at the same time, dropped a torpedo into the water which was not seen to run. Machine-gun fire from the PTs was directed at *Maddox*. However, there was no damage or injury to personnel. *Maddox* continued in a southerly direction to join with uss *Turner Joy* (DD 951) as *Ticonderoga* aircraft commenced attacking the PTs. *Zuni* rocket runs and 20mm strafing attacks were directed against two of the PTs, and they were damaged. The third PT remained dead in the water after the direct hit by *Maddox*.

• 0429 2 August: The aircraft broke off the engagement and escorted *Maddox* toward South Vietnam waters.

THE NEXT DAY, President Johnson released a statement instructing the Navy to continue the patrols in the Gulf of Tonkin, adding a second destroyer to the patrol and providing combat air patrol over the destroyers. He told the Navy to issue orders "To the commanders of the combat aircraft and the two destroyers to (a) attack any force which attacks them in international waters, and (b) attack with the objective not only of driving off the force but of destroying it."

JET FIGHTER with *Zuni* rockets attached readies for launching from catapult of *USS Ticonderoga* during air operations in Pacific waters earlier this year.





CONNIE planes include *Vigilantes.*



TARGETS for strikes by carrier based planes are indicated on chart by stars.

The day after the President issued these instructions it was necessary to implement the counter-attack measure, because *Maddox* and *Turner Joy* were attacked at night by another force of PT craft.

Ordering air action against "gunboats and certain supporting facilities in North Vietnam," the President announced that "repeated acts of violence against the armed forces of the United States must be met not only with alert defense, but with positive reply."

RETALIATING for the unprovoked aggression on the high seas, a Defense Department communique announced on 5 August that U. S. forces had struck the bases used by North Vietnamese naval craft.

During the night, 64 attack sorties were launched from the aircraft carriers *Ticonderoga* and *Constellation* (CVA 64) against four North Vietnamese patrol boat bases and an oil storage depot supporting these bases.

The oil storage depot, containing 14 tanks and representing 10 per cent of the petroleum storage capacity of the country, was 90 per cent destroyed. Smoke was observed rising to 14,000 feet.

In addition to damage to the bases and to their support facilities, approximately 25 patrol boats were damaged or destroyed.

Two of our aircraft were lost and two were damaged.

The destroyers *Maddox* and *Turner Joy* are continuing their patrol in international waters in the Far East.

The Secretary of Defense, Robert S. McNamara stated that the following moves were under way to reinforce our forces in the Pacific area:

- Transfer of an attack carrier group from the First Fleet to the Western Pacific,
- Movement of interceptor and fighter bomber aircraft into South Vietnam.
- Movement of United States fighter-bomber aircraft to Thailand.
- Transfer of interceptor and fighter bomber squadrons from the U. S. to advance bases in the Pacific.
- Movement of an antisubmarine task force into the South China Sea.
- The alerting and readying for movement of selected Army and Marine forces.

Meanwhile, in the changing situation, the mobile, flexible force of the powerful Seventh Fleet stands ready to perform whatever action is required of it, in its usual fashion.

ON DECK—*Ticonderoga's* air power also includes A-4 *Skyhawks* like these.









Vietnam Junk Force

IN THIS MODERN AGE of nuclear carriers and *Polaris* submarines, the U. S. Navy has many different assignments. One that is really different is advising the Vietnamese Navy in the operation of a special fleet of junks.

Located along the coast of the China Sea from the 17th parallel south to the 15th parallel, the First Coastal District Junk Force has 110 junks assigned to patrol 120 miles of coastline. This district, located approximately 400 miles northeast of Saigon, is patrolled by three types of junks: 55-foot command junks, 44-foot motor-sailer junks, and 31-foot sail-only junks.

These vessels are under the direct command of Lieutenant Trinh Xuan Phong, Vietnamese Navy. LT Phong's American counterpart is



The Story In Photos

Clockwise from Upper Left: (1) These junks, with their big sails gleaming in the early morning sun, give one the impression of serenity. Though all may seem peaceful, they are ready and able to do combat with any insurgents they find while on their patrol. (2) Six junks from Junk Division 15, in the First Coastal District of South Vietnam, sail away from their division headquarters, out into the open sea to begin their daily searches. (3) Lieutenant M.V.V. Nelson, USN, and Senior Chief Engineman J. W. McKinsey, USN, look over a captured Viet Cong junk. Note communist star carved on bow. (4) Lieutenant Nelson, USN, First Coastal District Junk Force advisor and Lieutenant Trinh Xuan Phong, commander of the unit, discuss some of their daily problems aboard their command junk. (5) A member of Vietnam's junk force (in 1962 photo) scans coastal waters in search of Viet Cong shipments and infiltration. (6) Heaviest firepower carried by any of the junks is the 30-caliber machine gun. These are mounted on bow of many command ships. (7) The men attached to the junk force in South Vietnam wear these uniforms so that they will look more inconspicuous, like ordinary fishermen.







on Patrol



Lieutenant Mark V. V. Nelson, USN.

The force is charged with providing a barrier against infiltration by communist insurgent junk movements into Vietnamese waters.

The junk force crews are authorized by the government of Vietnam to board and search any vessel inside the 10-mile fishing limit.

Armed with 30-cal. machineguns, Thompson sub-machineguns, Browning automatic rifles, M-1 carbines, hand grenades, flares, 2½-foot knives and other hand-to-hand combat weapons, this Navy force patrols the seas in groups of seven; one motorized and six sailing junks.

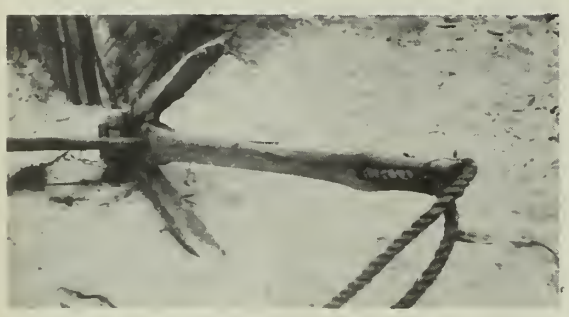
Lieutenant Nelson, Navy Advisory Group, MACV has said that communications between these junks while on patrol has shown to be very effective.

"Although the sailing junks carry no radios," LT Nelson states, "they are able to contact other junks in the patrol by either hoisting a red and white flag or yelling to a junk that may be nearby."

Because of the lack of radio equipment, the patrolling junks always keep in visual contact with each other as they mix with the local fishermen and check the identifica-











tion cards issued by the Vietnamese government.

The motorized junk that is the head of the patrol carriers a radio voice transmitter which can relay messages to division headquarters. At each division headquarters there is a short-wave unit which is used to maintain liaison with the district headquarters.

"Most of the junks used by the Junk Force are made of solid wood," said the naval advisor. "These wooden vessels are subject to toredo worms that attach themselves to the underside of the craft and bore their way into the wood."

To exterminate these destructive borers, the junks are docked every three months. An electric winch, placed at the head of a railroad track that extends into the water at a deep landing point, pulls the junks ashore.

At the docks, maintenance crews scrape the craft clean, drive bamboo plugs into the wormholes and coat the underside of the hulls with resin.

When asked what he particularly liked about the advisory work in Vietnam, Lieutenant Nelson said, "What I like most about Vietnam, and the advisory effort in particular, is the fighting spirit, the attitude and the simple cordiality of the Junk Force."

—Story and Photos by
John E. Jones, JO3, USN

Photo Captions

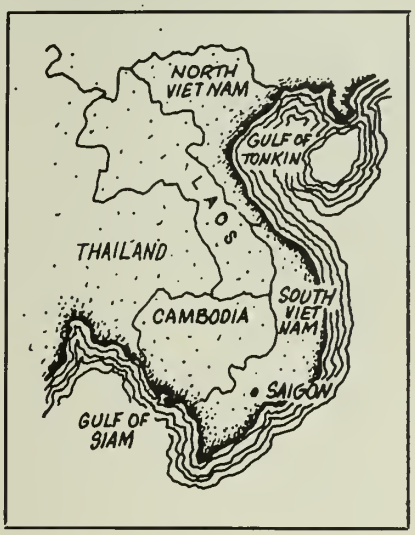
Counter clockwise from Upper Right: (1) A 55-foot command junk is hoisted up onto the beach by using marine railway. This railway can dock a command junk and a motor-sailer junk at the same time. (2) U. S. Navy advisor, Lieutenant Nelson, USN, suggested that boat houses on the command junks be widened so that crews can sleep inside on their night patrols. Junk at left has been widened—junk on right has not. (3) Most junks in the Vietnamese Navy's Junk Force use wooden anchors, although some iron anchors are also in use. (4) All food that is cooked on the command junks is prepared over a bed of charcoal, such as this one, in a small box lined with sand. (5) Division 11 headquarters —Most of the buildings in the First Coastal District are constructed of woven bamboo with thatched roofs.

'In the Highest Tradition'

JUST ABOUT HALF WAY around the world from the geographical center of the United States a relatively small group of Navymen are going about their business much as Navymen do wherever they may be. Earlier, they had received their orders for overseas assignment, packed their gear and shoved off. Some brought their dependents with them. Others did not.

However, by and large, the business of these men is somewhat different from the usual assignment. Most of these men are attached to the U. S. Navy Advisory Group, Military Assistance Command, Vietnam. Others are with the Headquarters Support Activity, Saigon. Some are attached to the Seventh Fleet.

No matter what the organizational structure, an overseas or sea duty assignment has its share of desk work and paperwork. Typewriters and filing cabinets are as essential here as back in the States. Billets, in general, require routine duties, much



the same as Navy billets anywhere.

But that is not all. Some jobs are more strenuous, more dangerous, than others. All of these men have been aware of the great responsibilities they share while serving alongside their Vietnamese associates. In the following excerpts from the citations accompanying the awards tendered by the President, one theme is repeated again and again: ". . . has upheld the highest tradition of the United States Naval Service." The awards are for action occurring before the events of recent weeks.

Silver Star Medal

• ***Lieutenant William J. Greeves, USNR.*** Learning that a bomb was being placed in the lobby of the Capitol Kinh-Do Theater in Saigon, LT Greeves, in company with another U. S. officer, entered the main area of the theater and warned the unsuspecting U. S. servicemen and their dependents to take cover.

His warning, given without regard to the great risk to which he was exposing himself, only seconds before the bomb went off, enabled the occupants of the theater to gain protection by lying between the rows of seats, thereby preventing many more serious injuries and fatalities than

As ALL HANDS went to press the following Navymen had received citations for their outstanding work in assisting and guiding Vietnamese personnel in their attempts to resist aggression. Here are their names:

SILVER STAR MEDAL

LT William J. Greeves, USNR

LEGION OF MERIT

CAPT Joseph B. Drochnik, USN
CAPT Malcolm C. Friedman, USN

DISTINGUISHED FLYING CROSS

LT Charles F. Klusmonn, USN

NAVY AND MARINE CORPS MEDAL

LT Gerold C. Griffin (MC) USN

BRONZE STAR MEDALS

LT Daniel R. Cowon, USN
LT Alton I. Crowell, USN
LT Edword J. Dyer, USNR
LT Wesley A. Hoch, USN
BM1 Cloude O. Peverill, USN
LT Clyde V. W. Popowich, (CEC) USN
GM1 Jae T. Pritchord, USN
LT Dollas W. Shawkey, USN

AIR MEDALS

HM3 Richard E. Baldwin, USN (two owords)
HN William V. Boltzer, USN
HMC Clifford D. Carter, USN
LT Robert N. Conrod, USN (four awords) (Medical Corps)
HM3 Deon R. Holmes, USN
HM2 Jose M. Silvas, USN
LT Ronold F. Swonger, USN (two owords) (Medical Corps)
HM2 Anthony M. Vega, USN
LTJG George S. Bason, Jr., USNR
LT Robert L. Broce, USN
LTJG Joseph W. Brant, USNR
LTJG Kenneth L. Burgess, USNR
LTJG Roy O. Campbell, USNR
LT Kent R. Clark, USN
LT Jomes U. Crouse, USN



Silver Stor Medol

LCDR Lucius B. Day, Jr., USNR
LTJG Rabert L. Edgertan, USNR
LTJG Arnold P. Fust, USNR
LTJG Burtan P. Harger, USNR
LT Arthur J. Henderson, USNR
LTJG Rodney L. Mosh, USNR
LT Benjamin H. McCart, USNR
LT James F. Meehon, USN
LTJG Michoel P. Murray, USNR
LCDR Robert E. Nelson, USN
LCDR William H. L. Reeder, USN
LT Stuort A. Skelton, USN
LTJG Deon E. Slaan, USNR
LT Duncon P. Stevens, USN

NAVY COMMENDATION MEDALS

LT Robert N. Conrod (MC) USN
HM3 Monuel R. Dentan, USN
LT Bruce C. Farrell, (MC) USN
LT Billy D. Groham, USNR
LT Russell F. Holcamb, USNR
HM3 Dean R. Holmes, USN (twa awards)
LT William F. Lynch (MC) USN
HN Cloude Rice, USN
CDR Froncis J. Sisk, USN
LTJG Charles G. Stawers, USNR
YN2 Russell W. Baker, USN (Army Commendotion Medal)

SECNAV COMMENDATION FOR ACHIEVEMENT

SFC Ashtan H. Cox, USN
DCCA Richard A. Gunn, USN



Legion of Merit



Distinguished Flying Cross



Navy and Marine Corps Medal

actually occurred. Lieutenant Greeves was himself slightly wounded by the explosion. He was cited for "courageous and decisive action in the face of extreme danger," and awarded the Silver Star.

Legion of Merit

• ***Captain Joseph B. Drachnik, USN.*** Serving as advisor to the Commander, Vietnamese Navy during a period when active counterinsurgency operations were prosecuted by the Vietnamese Navy and Vietnamese Marine Corps, Captain Drachnik contributed significantly to the development of the Vietnamese Navy from an undermanned force with inadequate experience to a fully-manned, well-trained and equipped combat-tested Navy.

Under his supervision the number of Vietnamese Navy ships was nearly doubled, and crews of all ships were trained by facilities which were developed to U. S. Navy standards. In collaboration with Captain Drachnik, his Vietnamese counterpart planned and directed the construction of a large fleet of junks to provide coastal surveillance. Overhaul schedules were consistently met, and ships and boats were kept at a high peak of material readiness.

• ***Captain Malcolm C. Friedman, USN.*** Assuming duties of great responsibility as the first commanding officer of Headquarters Support Activity, Saigon, at a time when speed was a vital factor, he quickly organized and established full scale logistic support operations to growing numbers of U. S. military personnel moving into the Republic of Vietnam in 1962 and 1963. With brilliant leadership and organization, Captain Friedman rendered valuable and distinguished service and contributed greatly to the success of the U. S. military assistance program to the Republic of Vietnam.

Distinguished Flying Cross

• ***Lieutenant Charles F. Klusmann, USN.*** Serving with Light Photographic Squadron 63, Detachment C, aboard uss *Kitty Hawk* (CVA 63), Lieutenant Klusmann engaged in unarmed reconnaissance flights over Laos in the Plaines des Jarres area. On 21 May 1964, his first flight into the area, his aircraft was struck by ground fire, and burned for a period of 20 minutes.

Through superior airmanship, he was able to return safely to his ship. On 6 June, on another low-level flight, his aircraft was shot down about 10 miles south of Ban Ban. Lieutenant Klusmann ejected from his aircraft and was observed on the ground. An attempt was made to rescue him by helicopter from a clearing, but as the helicopter approached the area Lieutenant Klusmann waved it off. Almost immediately, he was observed to be surrounded by Pathet Lao troops.

The rescue helicopter was subjected to ground fire and one of its occupants was wounded before it could depart the area. Subsequently, the Chinese Communist radio announced that the Pathet Lao had captured Lieutenant Klusmann.

Navy and Marine Corps Medal

• ***Lieutenant Gerald C. Griffin, MC, USN.*** Lieutenant Griffin was serving as a naval flight surgeon aboard a U. S. Marine Corps helicopter which crashed and burned on a densely wooded mountain ridge while en route to an Army of the Republic of Vietnam command post. As one of five survivors of the initial crash and subsequent fire, Lieutenant Griffin, although sustaining serious injuries from which he later succumbed, concerned himself with the condition of his squadron mates, lending them medical advice and words of encouragement throughout a five-hour wait for rescue.

When a doctor and corpsman arrived by helicopter, Lieutenant Griffin steadfastly refused medical assistance for himself until the other survivors were cared for. During this period be aided the medical rescue team with his professional and technical knowledge.

Bronze Star Medals

• ***Lieutenant Daniel R. Cowan, USN.*** Exposed to rockets, mines and sniper fire during 12 operations involving actual combat with Viet Cong forces, Lieutenant Cowan served as adviser to his Vietnamese counterpart, making a marked contribution to the successful completion of all operations. Lieutenant Cowan constantly sought methods for improving operational techniques within his River Assault Groups.

Mainly through his efforts, the concept of small task groups composed of an LCM and high-speed boats has been developed and employed in support of combined operations. He has been instrumental in establishing combat information centers for tactical information, communications in command boats, methods for deployment of boats in minesweeping formations, and techniques to minimize damage.

• ***Lieutenant Alton L. Crowell, Jr., USN.*** Participating in a combat operation with units of the Vietnamese Navy Coastal Force against hostile Viet Cong forces at Vinh Hy, Lieutenant Crowell displayed leadership and skill in executing his advisory duties while under fire. Although wounded and bleeding profusely with a bullet lodged in his left arm, he refused to be evacuated, thereby contributing significantly to the successful completion of the operation.

• ***Lieutenant Edward J. Dyer, USNR.*** In the face of concentrated hostile small-arms fire which resulted in two hits on the helicopter in which he was flying, Lieutenant Dyer personally delivered 10,000 rounds of badly needed ammunition to a Vietnamese Navy Junk Division under heavy Viet Cong attack.

This action was directly responsible for preventing the base from being overrun by Viet Cong forces. His outstanding advisory efforts in assisting his Vietnamese Navy counterpart in arranging flare drops, air strikes, and air evacuations won the respect and admiration of all Vietnamese with whom he worked, and instilled within them the same enthusiasm and aggressiveness which characterized his own performance.

• ***Lieutenant Wesley A. Hoch, USN.*** Lieutenant Hoch exercised leadership and professional competence in inspiring and assisting his Vietnamese counterpart in the operation and administration of seven junk divisions and varying numbers of Sea Force ships assigned area support, resulting in the establishment of firm government control over selected areas and the denial to the Viet Cong of the use of islands of the Gulf of Siam as effective bases of operation.

Control of the counterinsurgency operations in Vietnam was furthered by the continuous harassing pressure extended by the junk divisions assigned; illegal movements by sea were suppressed; attacks against Viet Cong logistic lines and positions were made; and numerous personnel and material casualties were inflicted upon the Viet Cong.

• ***Boatswain's Mate First Class Claude O. Peverill, USN.*** Sharing the living conditions of the Vietnamese Navy Junkmen, Peverill provided advisory assistance to the seven Junk Division bases in the Third Coastal District, often while under attack or subjected to harassing gunfire.

On two occasions, he accompanied junks and Junk Division personnel in shifting their permanent base locations. In both of these operations, Peverill was instrumental in ensuring the success of the movements and in achieving resumption of operations.

• ***Lieutenant Dallas W. Shawkey, USN.*** Participating in an operation with units of the Vietnamese Navy Junk Force against Viet Cong forces in Vinh Hy Bay, Lieutenant Shawkey advised his Vietnamese Navy counterpart on the proper tactical deployment of the eight junks and one motor gunboat involved in the operation.

When the command junk in which Lieutenant Shawkey was embarked was subjected to hostile fire from hidden positions ashore, he remained in an exposed position on deck as an example to his associates and to encourage the Vietnamese naval gunners to return the fire. Lieutenant Shawkey was severely wounded during this encounter.

• ***Lieutenant Clyde V. W. Popowich, CEC, USN.*** Lieutenant Popowich, while serving as commanding officer of a Seabee Technical Assistance Team, was responsible for a counterinsurgency (civic action) mission of construction, contributing greatly to its completion. Subjected to hostile fire throughout this period, he rendered invaluable aid to the U. S. Special Forces in resisting Viet Cong attacks.

An enthusiastic and diligent worker, Lieutenant Popowich assisted in building 17 bridges and 15 kilometers of new road, and regrading 46 kilometers of road to improve commerce and communications between strategic hamlets.

• ***Gunner's Mate First Class Joe T. Pritchard, USN.*** Sharing hazardous conditions of the Vietnamese Navy Junkmen, Pritchard participated in numerous Junk Force patrol operations against the Viet Cong.

During one of these operations, although wounded by shrapnel, he continued to provide advice and assistance to his Vietnamese counterparts and completed the mission, providing an example of leadership under fire.

In addition, he gave unsparingly of his own time to improve the living conditions of Vietnamese Navy Junk Force crew members and their families and of civilians residing in the area. During one three-week period, he supervised a medical team which treated over 10,000 villagers in the Viet Cong-infested Ca Mau area.



Bronze Star Medal



Air Medal



Navy Commendation Medal



BUSY SPOT—At Headquarters, Support Activity, Saigon, orders for 50,000 tons for tri-service needs are issued monthly.

HEADQUARTERS SUPPORT:

Helping the cause of freedom in Vietnam are thousands of American military men. Represented among them are Army and Navy personnel, Air Force men and Marines. The jobs they do vary: Some are instructors, others are military advisers, still others are experts in administrative and supply categories.

The following account describes the role performed by a comparatively small group of Navymen—officers and enlisted—who are in the all-important field of supply. This article was written by Commander John D. Knipple, SC, USN, who was Material Division Officer, in the Headquarters Support Activity, Saigon. The report first appeared in the BuSandA Monthly Newsletter, and is presented in ALL HANDS, *with permission, to point up one more aspect of the Navy job in Vietnam.*

WHILE THE U. S. military effort in Vietnam is primarily advisory, various echelons of logistic support must be established to ensure a continuous flow of material and equipment to personnel operating with field units.

Military and economic aid to Vietnam assumes many forms and may manifest itself in road and bridge construction, the digging of community wells to provide a constant source of water, or the movement of whole communities into the relative security of a stategic hamlet.

Civic action and medical assistance teams work closely to organize schools, establish municipal offices and set up first aid stations in remote areas.

Military initiative must be maintained by well-trained, properly equipped and effectively balanced counterinsurgency forces, capable of carrying the war to the enemy in the rice paddies of the Mekong delta, and dense jungle swamps of the interior, or in the mountainous Montagnard villages.

This massive effort requires prompt and continuing support. Construction equipment must be on site before the rainy season. Vast quantities of foodstuffs must be readily available and quickly transported to advisory detachments operating with limited storage capabilities. Military supplies must be positioned at strategic points throughout Vietnam so that the daily business of war may continue without interruption.

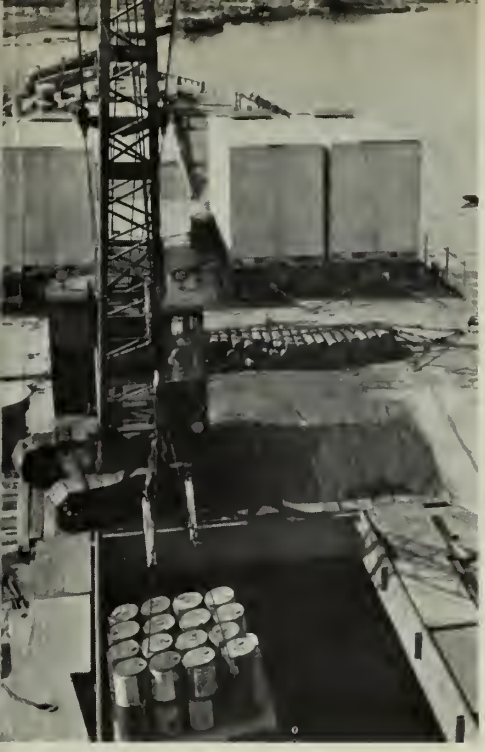
Such is the challenge of Vietnam.

TO HELP MEET this challenge, Headquarters Support Activity, Saigon, was established on 1 July 1962, under the command of a Navy captain. Its mission was to provide administrative and logistical support to the Headquarters, U. S. Military Assistance Command, Vietnam; Headquarters, Military Assistance Advisory Group, Vietnam; and other activities and units as designated by the Chief of Naval Operations.

Within this organization the Navymen who are experts in supply and fiscal matters play an important role in furnishing necessary supplies and services. Staffed by 19 officers of the Supply Corps and 97 U. S. Navy enlisted personnel, the Supply and Fiscal Department has responded to tri-service needs with maximum service at minimum cost. To describe the multitude of services provided, the operation of the port is a logical point of departure.

A port terminal office is maintained in the commercial port of Saigon where MSTS vessels rub shoulders with commercial vessels of diverse flags and ports of origin. A typical month will see the processing and documentation of more than 50,000 measured tons of military and general cargo destined for stowage in Supply Department warehouses, delivery to the Republic of Vietnam military forces and other consignees, or transshipment directly to other units in-country.

AN AVERAGE OF 30 vessels discharged and backloaded each



SUPPLIES are unloaded in Vietnam.

SAIGON



ON GUARD—A Vietnamese soldier stands guard at the support headquarters. Letters on his helmet stand for Headquarters, Support Activity, Saigon.

month creates a beehive of activity in Vietnam's leading seaport, where a small group of U. S. Navy Supply Corps officers and enlisted personnel join forces with locally hired and trained Vietnamese employees, as well as commercial stevedores, to provide round-the-clock cargo handling operations.

Personnel of Cargo Handling Battalion Two, assigned on temporary duty from their home base at Subic Bay, Philippine Islands, augment port terminal personnel, thus maintaining their facility as cargo handlers.

Under the operational control of the commanding officer, Headquarters Support Activity, three LSTs, chartered on a per diem basis from MSTS, carry supplies to the fighting forces outside the city of Saigon.

Operating on a rigidly maintained sailing schedule and manned by Japanese crews, these workhorses of World War II fame transport the varied implements of war to the three up-country ports of the Republic of Vietnam: Danang, Qui Nhon and Nha Trang.

These vessels are offloaded under contractual arrangements with local stevedoring firms, and material destined for in-country position is moved by truck or air, depending upon facilities and the priority assigned.

Promoting interservice relationship while providing support is the shopper-shipper service offered by personnel of the Field Support Branch. Field units or individuals far removed from so-called "normal" support channels depend up the Navy's supply system for food and other necessities of life.

Purchasing, packaging, manifesting and shipping by LST, air freight and commerical or military truck, over 800,000 pounds of provisions, commissary and exchange items each month keep a busy crew happy in the knowledge that maintenance of this lifeline is a substantial contribution to the war effort in Vietnam.

The supporting arm of Navy supply in Vietnam also assists both new arrivals and departing personnel in processing incoming and outgoing shipments of household effects and baggage.

A Joint Military Clothing Store, officially opened on 1 Oct 1963, stocks clothing and uniform accessories for members of each branch of the military service.

THE NAVAL SUPPLY CENTER, Oakland, Calif., is the primary source of supply for stock replenishments of some 10,000 line items of both provisions and general stores material carried in stock in warehouses utilized through local leasing arrangements. Additionally, support is received from Defense Supply Agency depots located throughout the U. S.

To the military personnel serving in Vietnam, combined forces and joint service are a way of life. For example, within the Fiscal Division, U. S. Navy officer and enlisted personnel work with Vietnamese Army officers, U. S. Army enlisted personnel, U. S. Civil Service, and Vietnamese local national employees in providing fiscal accounting and disbursing services.

A team of disbursing agents travel the length and breadth of Vietnam, using every conceivable method of transportation, to bring monthly paydays to the troops in remote areas. No principle of supply support is ignored, no area left untended, as the Supply Corps proves its versatility in anticipating and meeting the varied demands of operations in Vietnam.

The Navy supply effort in Vietnam is visible; a tangible force working in support of military assistance and advisory units stationed at key locations throughout this country.



PEOPLE ON THE GO—Typical of cities all around the world, traffic in Saigon is heavy throughout the day.

Assignment: Vietnam

IF YOU RECEIVE orders to Vietnam, you could be looking forward to one of the most challenging assignments of your career. Here's a thumbnail sketch of what you can expect.

Chances are you'll be assigned to Headquarters Support Activity Saigon, since it is the largest Navy command in Vietnam. But there are other assignments such as Military Assistance Command, Vietnam (MAC-V) and the Navy Advisory Group. You'll receive your final billet assignment when you arrive there.

Vietnam has a typical tropical climate with long wet and dry seasons and constant heat. This will require some getting used to, mentally and emotionally, since most Americans are accustomed to living in a four-season climate.

In your first week or two you'll develop an increased capacity for sweating without undue loss of salt. If you perform a lot of heavy work and perspire excessively, take one or two salt tablets a day. Normally, however, extra salt is unnecessary for the average American.

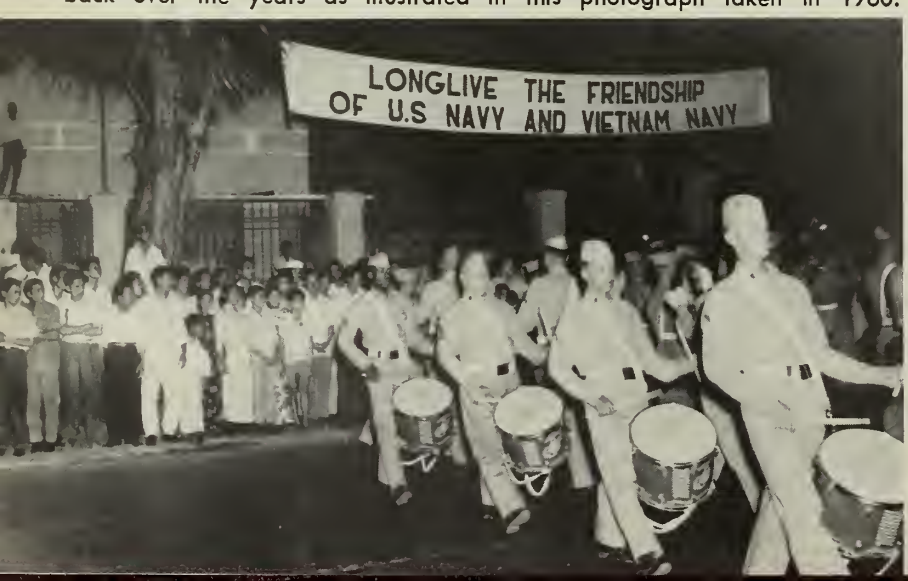
In a hot climate, you don't need to eat as much, since calories are used in sustaining body heat. Hence, the average meal in the states can cause you to put on excess pounds in Vietnam. Alcohol also causes increased body heat and thus aggravates the climatic effect.

Language—Vietnamese is the spoken language, with Chinese, French and English as secondary languages. Classes are available if you wish to study Vietnamese, although for most Westerners it is a difficult language to learn. In the time available you will probably find it difficult to progress beyond the stage of being able to exchange polite greetings or bargain with shopkeepers. French is spoken in most restaurants and by many servants.

Quarters—When you arrive in Saigon, you'll be assigned to transient quarters in a local hotel. If you are reporting to a PCS assignment, you'll be assigned to a permanent BOQ/BEQ as soon as space becomes available. At present, a wait of one to three months is necessary.

Facilities for dependents—If you should be authorized to have your dependents travel with you, or if your dependents join you later, you

FRIENDLY TIES between the U. S. Navy and the Navy of Vietnam date back over the years as illustrated in this photograph taken in 1960.



will find the government-leased housing very satisfactory. Each house has enough furniture to make for comfortable living. But you'll have to provide the dishes, cooking utensils, linen, table lamps and any other items you may want beyond the essentials.

The Navy Commissary and Exchange carry most goods that would not otherwise be available.

School facilities are good by usual stateside standards. The teachers are, for the most part, dependents stationed in Saigon who have teacher's certificates and/or degrees from American educational institutions. Tuition for your dependents will be paid by the government to the extent authorized by the Secretary of the Navy. Modest administrative fees must be borne by you.

All families employ servants, since it is difficult for Americans to get along without their help in solving local household and shopping problems.

Personal and Household Gear—If you travel by MATS, you'll probably be authorized to carry 165 pounds of baggage. Current allowance for household goods shipments may be obtained from *Joint Travel Regulations* and your transportation office.

Your Car—It would be a good idea to put your car in storage or sell it, rather than take it to Vietnam. With the lack of traffic education and the increasingly crowded conditions in Saigon, traffic is heavy in all areas of the city throughout the day.

Uniforms—You will be required to wear whites or khakis while on duty. Make sure you have an ample supply when you go. Since there are limited uniform facilities in Saigon, many military personnel have had uniforms (and civvies) made inexpensively by local tailors who do excellent work.

It would be wise to bring one set each of summer and winter dress uniforms for formal occasions or ceremonies in Saigon or an R & R trip out of the area. Caps, insignia and gold braid are not available in Saigon and should be brought with you from the states.

Off-duty dress is usually casual. Sport shirts, generally conservative in color, are worn at many informal social events. You should have a lightweight suit and three or four pairs of slacks. All your clothing should be washable. A raincoat is also recommended.

Street shoes and sandals are available in Vietnam at reasonable prices. However, you are advised to purchase dress shoes, uniform shoes, gym or golf shoes (if desired) before you report, as prices for these items are high.

Pay and Per Diem—When you arrive in Vietnam, you may have to pay for your meals. Occasionally, government quarters are not immediately available, and you'll have to foot the bill. You'll be expected to arrive with enough funds to subsist, and possibly pay for a hotel room, until the next payday. Seventy-five dollars is the recommended minimum amount.

It's also a good idea to open a personal checking account before you leave for Vietnam. While you're there, you'll be limited to $100 U.S. currency per month. However, you'll be able to buy items in the Navy Exchange and Commissary Store and obtain local currency by check.

Payday is normally held on the last working day of each month. You'll receive $100 in U. S. currency and the balance by check. You'll also receive a cost-of-living allowance while serving in Vietnam. The actual



SIDE BY SIDE—U. S. and Vietnam Navymen participate in landing exercise in the Pacific. This ship is Vietnam's LST *VNNS Thi Nai*, on training job.

STREET SCENE—Bicycles and pedicabs are other means of transportation in Saigon, Vietnam, as shown below.





ANOTHER VIEW OF SAIGON—Living quarters are located over shops.

payment is revised periodically and varies with your rate or rank. Check *Joint Travel Regulations* for the current amount.

Mail and Communications—Mail is handled through the Air Force postal system.

Phone calls to the U. S. may be made from 0830 to 1100 any day except Sunday. Telephone reception varies from good to very bad, depending on weather conditions and cable traffic. The cost for three minutes is approximately five dollars. However, if someone in the U. S. calls you, it would cost him (or her) $12 for a three-minute chat.

Medical Facilities—The American Dispensary, located in Saigon, is limited in its treatment and facilities. If you have any chronic or recurrent illnesses, check with your doctor. You're also advised that if you need glasses, you should get them before you leave for Vietnam. In fact it's best if you can get an extra pair.

Most tropical diseases are common in Vietnam, but are preventable, for the most part, by certain sanitation procedures. All local water must be boiled before use, and all vegetables cooked or treated before eating.

'HOME SWEET HOME'—Bachelor enlisted quarters for U. S. Navymen.



Electrical Appliances—The electrical current in Vietnam is 50-cycle AC. Phonographs, tape recorders and other motor-operated items should be fitted with 50-cycle adapters before you ship them or bring them into the country. Most electric shavers operate satisfactorily.

Recreation—There is a golf course in Saigon; membership is open to all service personnel for a monthly fee of about seven dollars (eight dollars if a dependent plays). Although golf clubs are available from Special Services, it is best to ship your own if you intend to make use of the course. There is no pro shop, and Navy Exchange equipment is limited to golf balls.

The Cercle Sportif, a private French-Vietnamese club, is open to officer personnel only. The club offers swimming, tennis and other U. S. sports. The monthly membership runs about seven dollars.

Special Services operates a theater in Saigon and provides library facilities, record-loaning service, athletic gear and handicraft equipment.

An Armed Forces Radio Station operates 18 hours a day, presenting a variety of programs from top U. S. radio networks to local music and news broadcasts.

Newspapers and Magazines—The Asian editions of leading news magazines and an English-language daily newspaper are available in Vietnam. *Pacific Stars and Stripes*, which is air-shipped from Japan, is available on subscription basis.

Churches—An American Community Church (non-denominational Protestant) and an American Catholic Church are located in Saigon. Lay meetings of the Church of England and other denominations, and various Bible study groups, are also held in the Saigon area.

Rest and Recreation—You can travel to such places as Hong Kong, Bangkok, Tokyo and various cities in Vietnam through the R & R program offered by Special Services. Other flights to New Delhi and Singapore also are available.

Normally, only one trip a year may be made; you must have served at least three months in Vietnam to be eligible for out-of-country R & R. Dependents are authorized R & R only when accompanied on such trips by their military sponsor.



HERE SHE COMES—Task Group Alfa poses for group photo. *Below:* An S2-D *Tracker* drops bomb on 'enemy' sub.

Alfa Is a Bouncing Six

When most of us turned six years old we were ready to begin school. Task Group Alfa recently celebrated its sixth birthday, but it has been going to school learning antisubmarine warfare tactics—since the day it was born.

Task Group Alfa is the Navy's primary ASW unit. As such its team of strategists, planners and technicians bear a heavy responsibility for the development and advancement of ASW tactics, equipment and doctrine within the Navy.

For this mission Alfa has several versatile components which form a closely-knit group. The nucleus is the antisubmarine carrier USS *Randolph* (CVS 15), which has S2-D *Trackers,* E1-B *Tracers,* SH-3A *Sea Kings* and A4-C *Skyhawks* embarked. Other units are the destroyers USS *Mullinnix* (DD 944), *Laffey* (DD 724), D. H. Fox (DD 779), *Vogelgesang* (DD 862), *Stormes* (DD 780), *Holder* (DD 819) and *Lowry* (DD 770) and the submarines *Cubera* (SS 347) along with *Sirago* (SS 485).

With the flagship *Randolph* serving as a mobile air base, Navy aircraft are able to search thousands of square miles of ocean to counter possible threats to the world's shipping lanes.

The destroyers, speedy and maneuverable, with a variety of search and weapons systems at their disposal, are ready to engage an enemy in close cooperation with other units of the task group.

Two diesel-electric Guppy submarines can detect and track other submarines, then attack on their own or call in air or surface forces to do the job. In exercises, they help teach other Alfa units what might be expected of unfriendly subs.

This hunter-killer group is a relatively new concept in antisubmarine warfare. Formed in 1958, Task Group Alfa displays an offensive position in ASW—rather than wait for an attack, Alfa is constantly searching.



COMING UP—*USS Sirago* (SS 485) surfaces after playing part of enemy.



ON THE GO—TG rendezvouses with Service Force ships for fuel, ordnance and food. *Rt:* Tracer readies for launch.









THIRST QUENCHERS—Water storage tank goes up and *(right)* MCB vehicles are loaded after the Taiwan exercises.

On Joint Training Maneuvers

U. S. AMPHIBIOUS AND SEABEE units participated earlier this year with Nationalist Chinese Marines in Exercise Backpack, one of the largest amphibious exercises in the Western Pacific in recent years.

MCB Eleven, now deployed on Okinawa, played an important part in the joint Spring maneuvers.

The Seabees' role was to provide engineering support on an area and task basis in support of the landing force during operations ashore. MCB Eleven was responsible for completion of engineering tasks which included the improvement of landing beaches and harbors to facilitate backloading, maintenance of primary and alternate supply routes, repairing damaged or destroyed bridges, and the preparation of bypasses where necessary.

The Navy construction men boarded USS *Vernon County* (LST 1161) at Naha and loaded 682 tons of material and equipment needed to perform their mission on the exercise. *Vernon County* joined approximately 80 U. S. ships and departed Okinawa to join ships of the Republic of China in Taiwan.

After an eight-day zig-zag cruise through "enemy" waters MCB Eleven hit the beach at Taiwan at 4 a.m. They made a cautious tactical march up a river bed and set up a camp and command post.

The can-do experts proceeded to prepare water purification facilities, supplying water not only for their own group but also for a nearby Marine detachment and ACB-1. Four 3000-gallon portable storage tanks provided a total of 53,810 gallons for the seven-day stay on the island.

Radio and telephone communications were provided by H Company.

TENTING TONIGHT—CBs raise communications tent in command post.





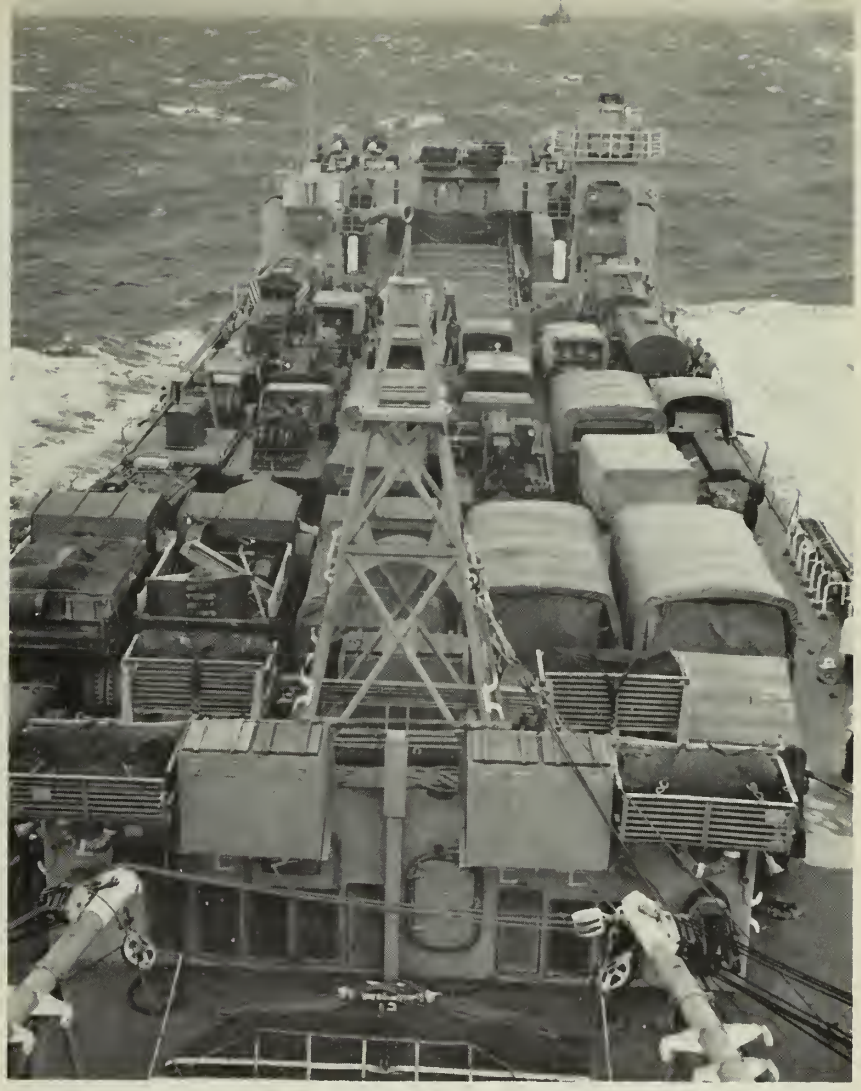
BACKPACK machinery boards LST.

in Taiwan

The Seabees and a small detachment of Marines were assigned as communicators. They also supervised setting up radio nets and installation of underground telephone lines. Equipment operators from A Company built two roads in the back country of Southern Taiwan for the Marine air wing and assisted in the building of a bridge in the rugged mountains. The most important job of the equipment operators was the maintenance and transportation of the battalion's vehicles, including mobile cranes, graders, dozers, fuel tankers, trucks and jeeps.

A break in the work and war games came to the men of MCB Eleven when they attended a USO show in the school auditorium of a nearby town. The entertainers were mostly Nationalist Chinese, and the performances included traditional dances and songs as well as a wall-shaking rock and roll and twist session. In addition the Seabees toured the ancient walled city of Heng Ch'ung where they enjoyed the sights and bargained for souvenirs.

—James C. Harrison, CN, USN



HEADING OUT—*USS Vernon County* (LST 1161) heads for Taiwan. *Below:* Republic of China Marines get the word aboard *USS Eldorado* (AGC 11).





ON TOP—Twelve hours after notification *Forrestal* and her aircraft were ready to join exercise Quick Kick.

Forrestal Fires a Quick Kick

FOR THE SECOND time that morning the quarterdeck ceremonies were conducted as the commanding officer of USS *Forrestal* (CVA 59) rushed through saluting sideboys. Second Fleet Headquarters had called him unexpectedly.

And then word came to the quarterdeck that no one was to leave the ship, except for official business. Before long word had filtered through the ship by grapevine that *Forrestal* probably would get underway. Many officers and men suddenly had some official job to do ashore, usually at a telephone booth where they called their wives or sweethearts.

Three hours after leaving the ship, the captain returned. "It is possible," he said to the crew," "that *Forrestal* will get underway sometime later today. I have been advised that we should make preparations for being away from the Norfolk area for 60 days."

That was the cue for preparations to begin. Messages went out to squadrons to bring their aircraft, officers and men back to *Forrestal*.

Two pilots, attached to Attack Squadron 83, were in California with their aircraft when the recall went out. With in-flight refueling, the pilots and planes were in Norfolk in four hours, ready for anything.

Fighter Squadron 103 was scheduled for a 10-day deployment to Guantanamo Bay. Two officers, 25 men and 11,000 pounds of equipment were already in Cuba when word went out to return to *Forrestal* at Norfolk.

All the squadron experienced similar problems, but all were back at Norfolk that day. Most were aboard by sundown; the remainder flew aboard the following morning.

The entire evolution involved transporting personnel more than a quarter million man-miles to get them back to the ship.

QUICK KICK V—*USS Forrestal* left with planes ready for action. *Rt:* In five hours 150 tons of supplies were loaded.







OFF SHE WENT—Surprise orders sent attack carrier *Forrestal* off to join joint Army-Navy-Air Force exercise.

Meanwhile, the disbursing officer knew he needed some money to pay the crew for two months. He promoted $280,000 from uss *Independence* (CVA 62), and $169,000 from a bank.

The Supply Department took less than five hours to load 150 tons of provisions.

The ship's retail store stock was low. A few phone calls to the vendors in the Norfolk area brought a response within an hour. Twenty-five tons of merchandise—tooth paste, razor blades, soap—began to arrive.

Twelve hours after the first preparations began, the 78,000-ton *Forrestal* pulled away from the pier. That night she anchored in Hampton Roads.

Weighing anchor the next morning, she maneuvered through Thimble Shoals Channel. *Forrestal* was at sea.

The emergency movement turned out to be an exercise—part of the joint Army-Navy Air Force Quick Kick V. It had taken *Forrestal* less than 12 hours to become operational from a leave and upkeep status.—

—Ensign Robert E. Woodman, USN







FRIENDLY SPOT—Men of *USS Tracer* enjoy their food in fine surroundings. *Rt:* Mess line at NAS Corpus Christi.

WELL ALMOST

Better Than Home-Cooking!

MOST NAVY CHOW is as good as the recruiters advertise. But it's an extra-lucky sailor who eats in a mess where the cooks are competing for the Ney championship—no matter how good the food is, it's bound to improve when the commissarymen begin limbering up for the Navy-wide contest.

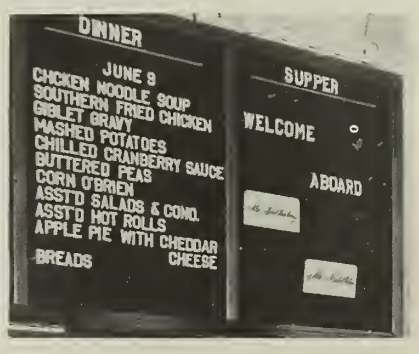
This makes the competition rough—so rough, in fact, that only once since the Ney Award made its debut in 1958 has a mess won the top prize twice. That was the Bay Hill galley at Guantanamo Bay, winner in 1958 and again in 1960.

Once again this year the judges have picked three first-time champs. They are USS *Observation Island* (EAG 154), the Navy's only *Polaris*-firing surface ship, USS *Tracer* (AGR 15), where the food is specially important because of long at-sea periods, and the U. S. Naval Air Station Corpus Christi, Texas. Last year NAS Corpus won second place in the ashore category.

The 1964 second-place awards went to USS *Dahlgren* (DLG 12), *Peterson* (DE 152) and the Naval Torpedo Station at Keyport, Wash. (including the mess branch at the Naval Ammunition Depot at Bangor). Running close behind for third prizes were USS *Okinawa* (LPH 3), *Alamo* (LSD 33) and the Naval Submarine Base, Pearl Harbor, Hawaii. Sub Base Pearl has not missed the finals since 1960 and was first place winner last year.

Until this year, annual Ney Awards were only given to two messes, one afloat and one ashore. But this year the afloat division was divided into a large and small ship category, giving the ships a more equitable basis for competition. Messes which feed more than 300 men are classified large ships, and those which serve less compete with the smaller vessels.

An officer and an enlisted man from each of the number one messes will represent their commands at the annual convention of the sponsoring association. The convention is to be held in Portland, Ore., where the representatives will be presented with bronze plaques on behalf of the Secretary of the Navy.



Dahlgren, *Peterson* and the Naval Torpedo Station, second place winners, will receive aluminum plaques and are entitled to send a commissaryman to the Culinary Institute of America for a two-week course in advanced cookery. Third place winners *Okinawa*, *Alamo* and Sub Base Pearl will receive citations from the sponsor and the Chief of the Bureau of Supplies and Accounts, who has the over-all responsibility for Navy messes.

The winners were picked from nearly 1200 messes, 84 per cent of which were in the afloat categories. They were judged on their performance in food preparation, serving techniques, sanitation, management and general effectiveness. Special attention was paid to such things as noise in the galley and scullery, cleanliness (Ney Award galleys must, of course, be spotless), food layout, meal variety, management and the over-all proficiency of messmen.

The 1964 contest opened in April, when commandants and type commanders chose messes to represent their commands in the semi-finals. During the month of April these 46





THE WINNING WAY—Crew members of *USS Observation Island* dig in with pride in their prize winning enlisted mess.

best-in-command messes were visited and inspected by officers from one of the eight field food service teams, acting as field representatives of the Ney Committee. The results of this inspection narrowed the list to nine finalists from which the winners were selected by the Ney committee itself, composed of Supply Corps officers, a sanitation specialist from the Bureau of Medicine and Surgery, and representatives of the Food Service Executives Association, sponsor of the Ney awards.

In addition to the first, second and third place winners, the best-in-command ships were: uss *Alamo* (LSD 33), *Bellatrix* (AF 62), *Coral Sea* (CVA 43), *Dixie* (AD 14), *Dodge County* (LST 772), *Exploit* (MSO 440), *Fulton* (AS 11), *Gannet* (MSC 290), *General W. A. Mann* (T-AP 112), *Henry Clay* (SSBN 625), *Klondike* (AR 22), *Morton* (DD 948), *Paiute* (ATF 159), *Paul Revere* (APA 248), *Saratoga* (CVA 60), *Sargo* (SSN 583), *Skywatcher* (AGR 3), *Sperry* (AS 12) and *Vulcan* (AR 5).

Semi-finalists in the ashore group were: Inshore Undersea Warfare Group Two; Naval Air Facility Naples, Italy; Navy Air Station Agana, Guam, Marianas Islands; Naval Air Station Glynco, Ga.; Naval Air Station Lakehurst, N. J.; Naval Air Station Lemoore, Calif.; Naval Cargo Handling Battalion One, Cheatham Annex, Williamsburg, Va.; Naval Communications Station Balboa, Fort Amador, C.Z.; Naval Construction Battalion Center, Davisville, R. I.; Naval Radio Station (T) Fort Allen, Puerto, Rico; Naval Security Group Activity, Kami Seya, Japan; Naval Station Annapolis, Md.; Naval Station Bermuda; Naval Station Kodiak, Alaska; Naval Station Subic Bay, Luzon, Republic of the Philippines; Naval Submarine Base New London, Groton, Conn.; Naval Training Center Great Lakes, Ill; Naval Weapons Laboratory, Dahlgren, Va.; San Diego Group Pacific Reserve Fleet.

Last year's winners were uss *Frank E. Evans* (DD 754) and the Naval Submarine Base at Pearl Harbor.

This is the seventh year of Ney competition. The contest was named in honor of the late Captain Edward F. Ney, Supply Corps, USN, who was the World War II director of the Bureau of Supplies and Accounts Subsistence Division.

This Navy Gedunk Stand is a Real Life Saver

NAS Key West is using the 'ole bean to promote highway safety—the coffee bean, that is. A Key West portable gedunk is dispatched 47 miles north of the base on Sunday evenings to provide an all-night "Safety Stop" for weary travelers.

Reason: Many Key West servicemen and civilians make the 300-mile round-trip journey to Miami on week ends, and the strain of the long drive is a recognized cause of many highway accidents. The coffee break is meant to attract travelers off the road for revitalization and a brief rest.

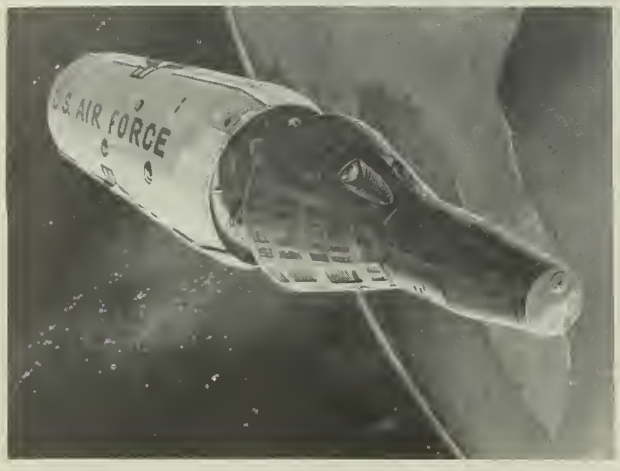
Over Memorial Day week end, when a high road death toll was predicted, the station's CO, Captain Charles D. Fonvielle, Jr., instituted the coffee stop to see if the Navy could help foil the forecasters locally. The result was encouraging—not one highway death occurred in Monroe County that week end, and Navy coffee might have contributed to this result. The roadside gedunk, set up in a supermarket parking lot, served gallons of coffee to motorists who pulled off the road to accept the offer.

Because of the response, the coffee stop has been put into regular Sunday-night operation, manned by NAS Key West personnel. The supermarket involved has agreed to let the Navy use its parking lot, and even advertises the gedunk on its lighted sign.

Many powers have been attributed to Navy coffee (including that of a paint remover), but if it is now preventing highway accidents, it can't be all bad.

SERVICESCOPE

Brief news items about other branches of the armed services.



WAY OUT—Artist's drawing shows USAF manned orbiting lab to be used for experiments in a near-earth orbit.

A COMPLETE MAP of the moon's visible surface has been compiled by the Army Map Service under an agreement with NASA. The map will be used, among other projects, to train astronauts who may land on the moon about 1970.

The map was printed on a scale of 1:5,000,000 from photographs taken by the Lick and Pic du Midi Observatories. More than 5000 surface features are listed alphabetically, with their longitudes and latitudes, on the reverse side of the printed version.

Army engineers are now working on a similar map which will be more than twice as large. This map should be available in about one year.

One of the incidental problems encountered while making the map was the marking of altitudes. On the earth, height is marked in relation to sea level. But on the moon there are no seas, despite the Latin word *mare*, meaning sea, which precedes the names of many craters. Mapmakers solved this problem by picking the bottom of Mosting A, a crater near the center of the moon's visible surface, as a reference point and listing all other altitudes in relation to it.



TWO IN ONE—The Army has adopted a duplex rifle cartridge to increase ability to hit target at close range.

Moon maps may be purchased from the Army for one dollar. Copies are available from the Army Map Service (code 16230), 6500 Brooks Lane, Washington, D. C.

Craters, mountain ranges and lunar "seas" appear to change shape under various lighting situations caused by the moon's phases. Consequently, the Army has also made several three-dimensional lunar models which are used in astronaut training—by studying these relief maps under different artificial lighting angles, it is possible to identify landmarks under almost any situation.

★ ★ ★

RADIO CONTROLLED parachutes and gliders are being developed by the Air Force. Equipped with a homing device, they can be automatically guided into the drop zone by a small radio beacon.

Standard parachutes often miss the drop zone by considerable distances due to wind, fog, smoke or darkness. But small prototypes of the homing parachute landed within 100 yards of the beacon when dropped from height of 3000 feet almost two-thirds of a mile from the target.

The complete parachutes and gliders are expected to be about 35 to 45 feet in size, capable of carrying 2000 pound payloads, and may be dropped at speeds as great as 150 mph. Eventually, the Air Force hopes to develop similar systems which can deliver payloads greater than 5000 pounds.

The experimental parachute has a glide angle which permits 12 feet of horizontal glide for each 10 feet of vertical drop. The glider, which resembles the paper airplanes made by schoolboys, is expected to glide 30 feet for each 10 feet of drop.

Tests of the new drop equipment will take place at Wright-Patterson AFB, Ohio; El Centro, Calif.; and Eglin AFB, Fla.

★ ★ ★

A DUPLEX RIFLE cartridge which fires not one, but two projectiles has been developed and adopted by the Army. The new ammunition increases the soldier's chances of hitting a target at ranges of 150 meters or less.

The cartridge is similar in appearance to the conventional type, but a second bullet nestles out of sight behind the main projectile. This secondary bullet is designed not to follow the first but to veer slightly.

If one bullet misses the target, the other may not.

The dual ammo is available to Army and Marine units in 7.62 mm cartridges, the standard size used by NATO countries. It is officially called the duplex ball cartridge.

★ ★ ★

A KING-SIZED ventilated plastic bag for use as an isolator for patients requiring protection from outside germ sources is being tested by the Army. The bag can be used to isolate communicable disease patients from medical personnel and other patients, and to keep germs away from burn patients and those undergoing organ transplants.

The new unit is being evaluated at Walter Reed

General Hospital in Washington, D. C. It is believed to have great potential for use in base hospitals.

The patient lies in a bed which is encased in an inflated cylinder of a transparent plastic material. A pair of gloves is molded into the plastic, and there is sufficient play in the bag's surface to permit the gloves to reach any point on the bed. This enables medical personnel to render any necessary treatment.

A console unit attached to the foot of the bed contains the ventilating system and air locks through which food, surgical equipment and bandages may be passed. Material passed through the air lock is treated with ultraviolet rays. The ventilating system changes the air in the bag completely once each minute, filtering it as it enters and leaves.

The isolator is believed to be a significant advance in the technology of "germ-free systems" applied to human problems.

★ ★ ★

SIMULATION STIMULATES progress. So a hypersonic shock tunnel which will simulate altitudes from 100,000 to 250,000 feet and speeds of Mach 10 (7620 mph) is being built for the Air Force at Wright-Patterson AFB, Ohio.

The test facility will be used to evaluate experimental components of advanced air-breathing propulsion systems, such as ramjets, to determine their ability to withstand high speeds.

Studies of the properties of different gases, as affected by pressure waves, will also be conducted.

The over-all size of the shock tunnel will be 168 feet long and 45 feet in diameter. Its test section will taper to a section 36 feet long, 10 feet in diameter.

To create hypersonic wind speeds, hydrogen gas stored at 30,000 psi (equivalent to 2000 atmospheres) will be pumped into the tunnel where it will impact on air stored at 150 psi, forcing the air through a small nozzle opening into the test section of the tunnel. Inside the test section will be the components being tested. Air passing over them will simulate hypersonic speeds at which aerospace craft would be flying.

★ ★ ★

THE COAST GUARD has commissioned USCGC *Reliance* (WPC 615), the service's first major ship to be built since World War II. *Reliance* is the first product of the Coast Guard's fleet modernization program and the fourth of the service's ships to bear the name.

The first *Reliance* served from 1861 to 1865 as a Union blockade ship in the Chesapeake Bay and as an escort vessel for ships moving Union troops.

The second *Reliance* was a sail schooner which was commissioned in 1866 and served in Alaska until 1875.

Reliance number three, a 125-footer, was commissioned in 1927 to become the nemesis of rum runners during prohibition days. She was in Honolulu when the Japanese attacked in 1941 and spent the war years at Pearl Harbor.

The new *Reliance* displaces 930 tons. Its twin propellers are each driven by a combination diesel engine and gas turbine developing 2500 horsepower. She has the capacity to tow ocean ships up to 10,000 gross tons. Her beam is 34 feet and she has a 10-and-one-half-foot draft. *Reliance* can maintain a sustained speed of 18 knots and has a cruising radius of 5000 miles at 15 knots.



TOMORROW'S ARMY—Land Walker from mural at the World's Fair is part of show on future Army mobility.

The ship's design features a superstructure arranged in three levels forward of midship, affording the wheelhouse 360 degrees visibility. She has a flight deck suitable for carrying the Coast Guard's newest type of rescue helicopter. A tower type mast with platform, yard and gaff accommodates the navigation and signal lights and antennas.

Instead of having a conventional stack, *Reliance's* exhaust is discharged through a vent in the stern.

In September, after her shakedown cruise in the Caribbean, *Reliance* will go to Corpus Christi, Texas, which will be her permanent station for law enforcement and offshore assistance work.



SHARP ONE—Medium endurance Coast Guard cutter USCGC *Reliance* (WPC 615) brings new look to service.

LETTERS TO THE EDITOR

These Seals Are Fine Performers

SIR: During the last few months I have heard rumors about a new Navy team called SEALs. But very little has been printed on the subject.

What is a SEAL team? What are they for? And who may apply?—W. G. K., EM1 (SS), USN.

• *SEALs are former UDT men who have received extra training in language, parachute jumping, demolition and sabotage. They are capable of infiltrating enemy-held territory and are used by task force commanders in performing special, commando-type operations.*

SEALs, because they must be qualified as both scuba divers and paratroopers, receive double hazardous duty pay.

If you're interested in becoming a SEAL, you must first qualify as an underwater demolition team member. Requests for UDT school may be submitted in accordance with CINCPACFLT Inst. 1510.4A or EPDOLANT Inst. 1510.2B. As things stand at present, UDT schools are accepting almost all comers who can qualify.

Once you have proven yourself to be a capable UDT man, you may volunteer for a SEAL team.

You may find the complete SEAL story in the next issue of ALL HANDS *magazine.*—ED.

Severance/Readjustment Pay

SIR: We were having a discussion on pay and allowances, and a question arose which you might help answer:

What are the conditions under which an individual receives a lump sum payment, in the form of severance pay, when being discharged from the Navy, and how much is this payment?—D. W. F., YN2, USN.

• *Severance pay is applicable only when the individual is involuntarily separated from the Navy. This can result from physical disability, or failure of an officer to be selected for the next grade in the allotted time, to name two instances.*

Upon being involuntarily separated, to be entitled to severance pay an individual must have served less than 20 years, and fall into one of the following categories:

• *He is discharged by reason of service connected disability rated at less than 30 per cent under VA standards.*

• *He has less than eight years' active service, and suffers a disability that is not the proximate result of performance of active duty, regardless of the percentage of disability. (Note: not applicable in time of war or national emergency).*

• *When, as a result of a periodic physical examination (if the individual is on the Temporary Disability Retired List), or the final examination conducted at the end of five years, it is determined that his physical disability is rated at less than 30 per cent.*

(There are other methods by which individuals receive compensation. These are not in the category of severance pay).

The amount payable as severance pay is determined by multiplying two months' basic pay of the individual's grade at the time he was placed on the temporary disability retired list, or date of separation, by the number of years of active service. Two years' basic pay is the maximum that can be paid.

Also, as we mentioned, severance pay is payable to Regular officers and warrant officers who are involuntarily separated by reason of failure to be selected for promotion, or for certain reasons other than physical disability. Amounts in these cases vary.

Reservists who are involuntarily released from active duty after completing at least five years' active duty immediately before being released are also entitled to compensation, termed readjustment pay. Generally, the amount of such readjustment pay is determined by multiplying two months' basic pay by the number of years of active service, up to 12 years, but not to exceed $15,000. Again, there are cases where a lesser rate would be applicable.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

What's With YN-PN Ratings?

SIR: Can you tell me whether or not the Bureau of Personnel plans to combine the YNs and PNs into one rating?—P. T. G., PN3.

• *No recommendations for combining the two have been presented to the Permanent Board for Review of the Enlisted Rating Structure.*

The Board doesn't know of any studies being conducted to justify such a merger although the combination has been suggested several times.—ED.

Wearing Distinguishing Marks

SIR: I am an SOG2, and have passed the change of rating exam for AX2. As a qualified aircrewman, I rate the aircrew wings and the aircrewman distinguishing mark. I also rate the sonar operator's distinguishing mark.

Here's my question: Since I rate two distinguishing marks, which one, if either, rates precedence? Should the aircrewman distinguishing mark be worn above or below the sonar operator's distinguishing mark on my right sleeve?—T. M., SOG2, USNR-R.

• *With one exception, there is no precedence among distinguishing marks as regards positioning on the sleeve. If the Navy "E" is awarded to anyone who is authorized to wear other distinguishing marks, the Navy "E" is worn one inch below the other insignia.*—ED.

Aircrewman Insignia: More Comments

SIR: Your reply to R. C. H., (page 24, May issue), concerning the aircrewman insignia seems inconsistent compared to the authorization to wear other insignia.

Submariners continue to wear their hard-earned dolphins after their last duty in submarines (and rightly so); the same applies to naval aviators long since grounded from flight. Similarly, a qualified diver doesn't have to dive day in and day out to display his insignia.

To carry it further, I should no longer wear my Asiatic-Pacific ribbon with its battle stars, because I'm not in the Pacific, the dates when I earned the ribbon are long past, and I'm certainly not in battle at the moment.

Granted, *BuPers Manual* says such-and-such, but do we keep fine young men in the Navy by telling them, in effect, "It's forever thus?" Too often we have the tendency to resist newer and better ways of doing things by saying simply, "That's the way it's always been done."

So couldn't someone in authority take another look at "BuPers Manual" and "Uniform Regulations" on the chance that the aircrewmen might have a valid point? If not, I offer the following alternatives:

(1) Take away the aviators' wings,

the submariners' dolphins, the line officers' command-at-sea emblem and other insignia of a similar nature when these devices no longer apply to the individual's present duties; or

(2) Abolish the aircrewman insignia as a device too easily earned and not worthy of retention by the one who qualifies to wear it.

In conclusion, if you look up the word "prestige", you will see the definition says nothing about being enhanced by exclusiveness, or limitation of numbers. So you can't relate the men of our Navy to the ownership of yachts. If you do, you confuse prestige with status symbols.—G. L G., LCDR, SC, USN.

• *Well said! Somecne in authority will take another look at the policy for wearing aircrewman breast insignia in the near future.*

The Permanent Naval Uniform Board is responsible for reviewing and recommending changes to the Secretary of the Navy through the Chief of Naval Operations. The Board already has placed the aircrewman insignia on its agenda for its next meeting. Your letter has been passed to the Board for information.—ED.



HARD WORKER—Pacific Fleet repair ship *USS Jason* (AR 8) has spent 20 years repairing damaged ships. *Jason* is homeported at San Diego, California.

E8/E9 Detailing Desk

SIR: I speak for myself and other E-9s with whom I have recently talked. We are happy to see that the Navy intends to make a more specific use of senior and master CPOs. If this proposal is carried through I am sure a great service will be done to the Navy's rating structure as a whole.

I fully expected duties of a more administrative nature upon making E-9, but so far I have been assigned about the same duties I performed as an E-6, E-7 and E-8. My crew now consists of one E-6, three E-5s, one E-4 and two strikers. Yet I am told this is an E-9 billet.—A. L., CSCM, USN.

• *The Bureau is trying to do what it can to iron out any kinks in the system of detailing senior and master chiefs. It is in the process of establishing an E-8/E-9 detailing desk, which will control the assignment of all super chiefs. This will ensure that they are assigned to existing E-8/E-9 billets, and are not assigned to E-7 or lower billets. This new detailing section will probably commence actual detailing around September, and thereafter all E-8s and E-9s will receive more personalized detailing, in a manner similar in many respects to officer detailing.*

But bear in mind that while this detailing desk can assign super chiefs to billets that are established as E-8/E-9 billets, it will not be in a position to determine if an authorized E-8 or E-9 billet is justifiable. This is a function which should be performed by individual commanding officers in accordance with BuPersInst. 5321.2E. Paragraph 5(b) of this Instruction solicits recommendations for reductions in allowances when the CO determines his requirements can be met with fewer personnel, or by personnel of lesser grades.—ED.

Qs and As By the Score

SIR: In the series of "Navy Mosts" articles, you included the name of a lieutenant who had completed 36 correspondence courses. On board USS *Tutuila* (ARG 4) we have a first class opticalman by the name of Stanley A. Smith who has completed 42 correspondence courses in seven and a half years.

Included in his list of satisfactory completions are such courses as the *Watch Officer, Blueprint Reading & Sketching, Submarine Periscopes, UCMJ,* and the high school and college level GED examinations. He is presently attending night classes under the tuition aid program at Old Dominion College.

Whether or not this is a record for satisfactory completions, it is certainly an indication of a desire to make the most of the opportunities offered in the naval service.—W. F. McCollom, ENS, USN.

• *We cannot argue with that, Sir. Thanks for the info and inspiration.*—ED.

Many Good Men Preceded You

SIR: I have just had the experience of being on a ship which crossed the equator, and I would like to know whether or not it is compulsory to go through the usual initiation ceremony.

I know this is a Navy tradition, but is it required by military rules or regulations?—R. G. S.

• *There aren't any military regulations which require crossing-the-line ceremonies, but more than one man has wisely rated the strength of tradition over the strength of law.*

We hope you got a charge out of the ceremonies. If you didn't, we hope you received a card which certifies you to be a member of the court of Neptunus Rex, so you won't have the doubtful pleasure of joining it again.—ED.

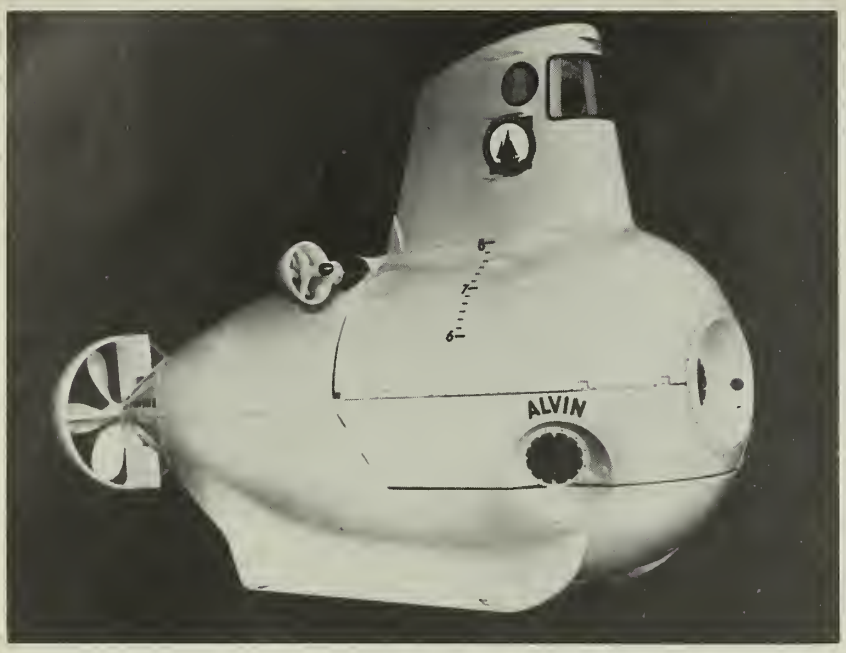
Who Comes First—RM1 or RM1?

SIR: Since the Navy has started rating enlisted men in two increments following a single exam, a situation which requires clarification has arisen. It is as follows:

One man made RM1 in November 1963. Two men made RM1 in January 1964 (in the second increment), but their advancement was retroactive to November for record purposes. How is seniority figured in this case?

Base Personnel states that all three of the above men made first class at the same time, so seniority must be computed from time in next lowest pay grade. —J. E. E., RMI, USN.

• *Base personnel is correct. All three men are considered as having made PO1 on the same date, that is, 16 November. Accordingly, precedence must be computed from the date of advancement to PO2, as stated in "BuPers Manual," Art. C-1202.*—ED.



A TWO-SEATER—Navy's research submarine *Alvin* (molded fiber glass hull shown above) is undergoing test dives in Atlantic off Massachusetts coast.

Succession to Command

SIR: Let's talk about succession to command for a moment. Particularly, the general procedure where limited duty officers and restricted line officers may assume command.

Article 1380 of *Navy Regs* allows for the following:

1. In ships, officers of the line of the Navy designated for limited duty, who are authorized to perform all deck duties afloat, may succeed to command.

2. Within other commands of the naval service, any limited duty officer with a designation appropriate to the function of the activity may succeed to command."

This provokes a couple of questions:

(1) Is "officers of the line designated for limited duty" here meant to include restricted line officers, that is, 161X?

(2) Or, is it the intent of subparagraph two of Article 1380 to restrict succession to command to limited duty officers only, that is, 646X?

I think a restricted line officer (161X) should succeed to command of a communications activity the same as a limited duty officer (646X). Am I correct?

Navy Regs does not spell it out, but the opinion at my duty station is that a 646X officer can succeed to comand, but that a 161X cannot unless he is authorized to do so by the Secretary of the Navy. I do not believe this is the intent of Article 1380—can you clarify this?

If I am correct, why doesn't the wording of subparagraph two of Article 1380 reflect this?—E. L. J., CTC, USN.

• *We'll start with a small point, which is also the answer to your first question. Title 10, U. S. Code, Section 5001, properly defines an "officer restricted in the performance of duty" as an "officer of the Navy designated for engineering duty, aeronautical engineering duty, special duty or limited duty." Your query is concerned with two types of restricted line officers—limited duty officers (646X) and special duty officers (161X).*

In your second question you ask if it's the intent of Article 1380, subparagraph two, "Navy Regs," to restrict succession to command to limited duty officers (646X) only.

No, it is not. We refer you to Article 1379, which is interpreted to mean that special duty officers (161X) are also eligible to succeed to command of either communications or non-communications shore activities when so authorized by the Secretary of the Navy.

However, special duty officers cannot automatically succeed to command. They must be authorized by SecNav, whereas limited duty officers can automatically succeed to command, but only of an activity appropriate to the designation of the limited duty officer.

The foregoing also answers your next question—is it correct that a special duty officer (161X) should succeed to command of an activity engaged in communications the same as a limited duty officer (646X)? Again, Article 1397 of "Navy Regs" is quite specific: "Officers of the line designated for . . . special duty shall not succeed to command except on shore and then only as authorized by the Secretary of the Navy."

Let's take a hypothetical case. Two lieutenant commanders, the first a special duty officer senior to the second, a limited duty officer, are serving at an activity appropriate to the designation of the LDO. Assuming that all other officers senior to these two officers were suddenly incapacitated, and assuming that the special duty officer was not authorized by SecNav to succeed to command, the limited duty officer would automatically succeed to command until the special duty officer was authorized to do so.

We take your last question to mean that if a special duty officer can automatically assume command of a communications activity, without the authorization from SecNav, why doesn't the wording of subparagraph two, Article 1380, reflect this? By now you know that a special duty officer cannot succeed to command without SecNav's authorization. On the other hand, a limited duty officer can, and that's what subparagraph two states.—ED.

Quick Canal Transit

SIR: We'd like to submit the following for a record on a round-trip transit of the Panama Canal by a Navy ship.

Earlier this year (January) our ship, USS *Walworth County* (LST 1164), made a round-trip transit of the Panama Canal in 21 hours and 59 minutes. Aboard were men of the Fourth Missile Battalion being transferred from Coco Solo, Canal Zone, to their headquarters at Flamenco Island on the Pacific side. They were off-loaded at their destination during the period between the two transits.

Is this a record?—A. J. L., ENS USNR.

• *We don't know if it's a record, but if it isn't you'll soon find out. Thanks for your letter.*—ED.

Niagara *Finds Firm Haven*

SIR: I enjoyed reading the article entitled *"Niagara's* Resurrection" in the April issue of ALL HANDS.

To say *Niagara* is still afloat, however, is stretching a point. When I visited Erie, I located the ship in a public park, where she was displayed

CONCRETE OCEAN—*USS Niagara* is on display near public docks on lower State Street, Erie, Pennsylvania.



on a permanent concrete foundation.

The bow and anchor of the *Wolverine*, ex- USS *Michigan* are also in this park.

I have enclosed a picture of *Niagara* on her foundation.—Howard C. Koeppen.

• *Thanks for the clarification. The ship in the picture you enclosed with your letter was, beyond a doubt, supported by concrete stanchions. Undoubtedly they were put there to prevent* Niagara *falls.*—ED.

Lyrical about Taluga

SIR: I just want to remind you that USS *Taluga* (AO 62) is still afloat and on her way home from WestPac, having successfully completed better than 150 underway fuel replenishments and pumped some 15,000,000 gallons of fuel.

Outside of the fact that we rescued two waterlogged fishermen, it was quite a routine deployment.

Just for the record, I submit the following lyric which may be sung anywhere, anytime, by anyone (to practically any tune):

Taluga the queen of the ailers —
May her fame be acclaimed anew,
Her crew's always willing and ready,
They excel in all tasks that they do.
Oh her fame has traveled before her,
And her deeds are an every one's tongue.
She will always be praised in the Navy —
That's Taluga — AO 62.

I will stand by for comments from *Neches, Passumpsic, Cimarron* or any of our oily sisters. — L. A. Moore, SKC, USN.

• Well, oily sisters?—ED.

Those 18-inch Guns Are Here Again

SIR: In May 1964, ALL HANDS published a letter concerning the fabled 18-inch naval rifles. Perhaps I can add something.

A few years after the end of World War II, I was stationed on the Coast and Geodetic Survey Ship *Pioneer*, which was engaged in cartographic work in the Aleutian area. While there I heard about two 18-inch Japanese guns located, so the story went, on a nearby island.

Several other *Pioneer* crew members and I made a boat trip to check the rumor. Sure enough, on the island of Little Kiska, we found two relatively large Japanese rifles. But neither were 18-inchers.

The futile search whetted my interest. In 1950 I reported aboard USS *Haven* (AH 12), which was reputed to carry an 18-inch rifle as ballast. Take it from me, it doesn't. A scrupulous and energetic search of *Haven's* nether spaces revealed nothing except the usual bilge debris.

Then, in 1956, while my ship was visiting Japan, I found my first real lead. It came in the form of a Yokosuka Naval Shipyard leading man who had been involved in the construction of the dreadnought *Yamato*.

According to him, both *Yamato* and *Musashi* carried 18-inch guns. As far as he knows, they were the only ships to do so. Both battleships were sunk by naval air forces in the later years of the war, and evidently no re-barrels were found during the occupation of Japan.—R. S. Dwinell, ENC (SS), USN.

• *Judging from the interest generated by the hunt for an 18-inch gun we suspect the first sailor to lay hands on one will be followed by fame and fortune for the remainder of his days.*

As for this latest, the Japanese yard worker evidently knew what he was talking about. At least, his argument is supported by the 1946-47 edition of "Jane's Fighting Ships." *According to* "Jane's," Yamato *and* Musashi *carried nine 18-inch rifles each.*

These monster guns fired a 3220-pound projectile.

Chief Dwinell's story increases the number of known 18 inchers from one to a total of 19. But chances of scrounging one remain the same. Yamato (*complete with guns*) *rests at the bottom of the East China Sea. Ditto* Musashi *in the Sibuyan Sea.*

So we're back where we began. The only 18-inch gun which might be available was last seen (as far as we know) at the Naval Proving Ground, Dahlgren Va., in 1947.

The story that this or a similar gun was used as ballast in a hospital ship may have some basis in fact. But if it does, we don't know what. Chances are, however, against such a gun being in Haven *or* USS Relief (*AH 1*), *as both ships have been searched. And we can't conceive of anyone overlooking an 18-incher.*—ED.



SNAPPY SAILOR—A Navyman on liberty in Paris points his camera at the city's famous landmark and takes a souvenir photo for the folks back home.

Recommissioning Cruisers?

SIR: I have heard a rumor that the Navy plans to recommission USS *Macon* (CA 132) and *Des Moines* (CA 134). According to the story, they will be converted to guided missile cruisers.

My main interest is *Macon*. I once served aboard her, and thought she was a fine vessel. So what about the stories? True, or scuttlebutt?—L. A. D., QM2, USN.

• *Strictly scuttlebutt. Sorry. According to the Bureau of Ships, there are no existing plans to activate any of the decommissioned cruisers. If a cruiser* were *to be reactivated in the future, it would probably not be* Macon, *but one or more of the newer CAs such as* Des Moines *or* USS Salem *(CA 139).*—ED.

Varsity Football? Sure—Maybe

SIR: Last year I played varsity football for NAS Pensacola. I would like to play again this year, but I'm due for orders before the season begins.

I'm trying to figure what my odds are for being assigned where there's a varsity squad. How many naval stations have a football team?—D. Y., ENS, USN.

• *Your odds are slim because, according to our best information, there*



PASSING IN REVIEW—Seven state flags are carried by recruits at Naval Training Center, San Diego, Calif., during basic training graduation exercises.

are only a handful of CONUS locations (among them: Newport, Memphis, Moffett Field, Pensacola and Barber's Point) where varsity football schedules are played, and a few more overseas. Authority for maintaining a varsity football team is given at the command level.

Also, no effort is made to place football players. If you happen to be lucky enough to be assigned where there's a team, we're sure the coach will be one of the first to welcome you aboard. If not, it looks as though you'll have to ride the bench.—ED.

Earned Those Stars

SIR: Your article on the "Fighting *McKee*" in the May issue brought back many memories of destroyer duty in the Pacific during World War II.

I joined USS *Sigsbee* (DD 502), a sister ship of *McKee*, at Pearl Harbor in early September 1943. Going aboard the first time, I reported to the Executive Officer, then a lieutenant who, I understand, did quite well in his chosen career. He now wears three stars and is Chief of Naval Personnel—Vice Admiral B. J. Semmes, Jr.

Sigsbee was part of Destroyer Squadron 25 and performed a variety of tasks in amphibious, carrier strike and escort operations. She was, I think, the only unit of DESRON 25 to suffer heavy damage as the result of enemy action.

On the 13th or 14th of April 1945 we were off Okinawa. About six destroyers, including *Sigsbee*, were on radar picket duty ahead of the carrier strike group. We were having chow when we received early warning that a group of kamikaze planes were heading our way for attack.

The Commodore, Captain "Hap" Parrish, ordered the DDs into a circular formation and pushed the speed to 30 knots. Thirteen aircraft were in the group; all were shot down and crashed in the vicinity.

But the 13th headed for *Sigsbee's* bridge. The forward 40-mm mounts started pounding the plane as soon as it came within range. It was deflected from the bridge and struck the after 5-inch mount.

The crash set off the 1000-pound bomb, which the aircraft carried, and the depth charges on the fantail. The after 75 feet of the ship disappeared; we were helpless without rudder or propellers.

The ship began to settle stern first until we carried out our jettison plan (throwing all non-essentials overboard). Then the ship leveled off and could be towed safely.

We were taken in tow by USS *Dashiell* (DD 659). It was a long, slow trip back to Pearl, about 30 days in all. Since the war was nearly over, *Sigsbee* did not get repaired in time to see further action.

Nevertheless, she was quite a ship. I spent my longest single GQ in her—36 hours during the Kwajalein Majuro assault. What ever happened to her?—Captain A. P. Carpenter, USN.

• *Thanks a lot for telling us of your experience aboard* Sigsbee.

Perhaps we can add a few words to your experience. As we understand the story, when the bomb exploded and set off the depth charges on the fantail the starboard engine, due to excessive vibration, could only be run at five knots. The port shaft, together with its propeller had snapped off, so the port engine was out.

It was at that point that Sigsbee *flooded aft and settled to main deck level and had to be towed to Guam.*

The concussion caused by the explosions made big dents in the deckhouse. Four men were killed and 74 wounded.

After Sigsbee *was repaired at Pearl Harbor, she got underway with Task Force 11 and headed for the East Coast. She arrived in time for the Navy Day celebration.*

In November 1945, Sigsbee *was decommissioned and placed in the Atlantic Reserve Fleet, Charleston, S. C. In 1960, she was moved to Philadelphia.*

In little more than two and one-half years' service, she had earned 10 battle stars on her Asiatic-Pacific Area Service Medal.—ED.

Reefer Referential

SIR: Captain Mossbottom again! But no nit-picking this time; only a howl at what he spotted in the May number of ALL HANDS.

When he read that squib on page 26 that "The standard reply from all was that a reefer was a refrigerator" (when asked "what is a reefer?"), he let out the loudest squawk heard along the shores of the Med (where's he's basking in retirement) since the time somebody threw a rubber banana to the rock apes in Gibraltar.

"Here, Sonny," he bellowed at me, "What a lot of blue water sailors that lad must have quizzed! Why, anybody who ever got the least bit of salt water in his whiskers always knew that a 'reefer' was a midshipman's cool weather coat and any real old-timer ought to remember that a 'reefer' was a cold-storage ship that supplied the Fleet in the old days. The last one in my outfit was the *Culgoa*, and believe it or not when she was out at sea she used to hoist sails to help her along!

"Last time the 'reefers' got together was in the summer of 1920 in Seattle, when the Middies put on their 'reefers' as members of a working party to break out some cold storage stock in the *Culgoa*. The party left the ship about 0400 because the provisions had to be unloaded and taken on board the other ships before the sun came up. Didn't have frozen foods in those days, so you write and tell 'em about it!"

So, I'm letting you know what the old fud had to say on the subject of "reefers."—Isaiah Olch, CAPT, USN (Ret).

• *Cap'n Mossbottom should be relieved to learn that all our salt isn't in the cruet. Seems our inquiring reporter,*

a lad who would forsake bell bottoms for belles, slipped that one in on us while we were up reefing the topsails.

Investigation revealed that during his quest for knowledge he selflessly diverted himself to a section of the Bureau staffed by young Waves who, in their own right, are very knowledgeable, but who were understandably vague on the early meanings of reefer.

Even had he consulted Mr. Webster he could have done better. He would have learned that a reefer is a close-fitting, usually double-breasted jacket or short coat of thick cloth.

To which we could add, midshipmen even used to be referred to as reefers.

We have since taken our reporter aside and given extensive tutoring on the meanings of reefer.

Incidentally for an account of the modern sea-going variety of this term, we refer you to the article in the March 1963 issue (page 18), entitled, "The Lively Voyage of a Navy Reefer."—ED.

Ship Reunions

News of reunians of ships and organizations will be corried in this column from time to time. In planning o reunion, best results will be obtained by notifying the Editor, ALL HANDS Mogozine, Room 1809, Bureou of Navol Personnel, Novy Department, Washington 25, D. C., four months in odvance.

- USS *Joseph T. Dickman* (APA 13)—A reunion is being planned for July 1965. Former shipmates may write to Philip V. LaBriola, 1100 Hunter's Lane, Oreland, Pa., 19075.
- USS *Tazewell* (APA 209)—A reunion for plank owners and World War II crew members is being planned, with time and place to be designated by mutual consent. For details, write to Rudolph J. Szpak, BMC, USNR, 19 Fowler St., Salem, Mass., 01970.

Search for the Monitor

SIR: I would appreciate any information you can give to help settle a dispute. I contend that the wreck of the famous Civil War ironclad *Monitor* has been discovered; my friend says that this report has proven to be false. Which of us is correct?

Can you also given me any information about the Confederate ironclad gunboat *Muscogee*, the wreckage of which was recently found near Columbus, Ga.? I understand that plans are underway to raise the vessel and restore it as a museum.

Finally, have any other wrecks of Civil War ironclads been located? I believe that I read something to the effect that the wreck of the gunboat *Cairo* had been found near Vicksburg, Miss., and that plans were also underway to raise and restore it as a museum.

Any information you can give on this subject will be helpful, because my hobby is studying about naval history, my particular interest being the ironclads of the Civil War era.—C. W. S., MA3, USN.

- *We referred your query to the Naval History Division. They advise that the Navy has never been able to establish the exact location of the sinking of* Monitor, *although repeated attempts to locate her have been made since she was lost at sea on 31 Dec 1862.*

USS Rhode Island, *which had* Monitor *in tow, attempted to hold her position through the night of the sinking, and the next morning she sounded the bottom at 35 fathoms in the general vicinity—some 20 miles south-southwest of Cape Hatteras. This spot is a virtual graveyard of ships.*

On 30 Sep 1953 the Secretary of the Navy made a formal declaration of abandonment of Monitor. *The Monitor Historical Society, Inc., of the District of Columbia, made extensive efforts to locate and salvage her without success. This organization is now defunct. The president and founder was a retired postal service employee who for 50 years cherished a dream of raising this historic ironclad. He personally dragged for traces of* Monitor *and devoted all his time to the project upon his retirement in 1953.*

Since 1953 Coast Guard and private craft have combed the area, making electronic soundings. Skindivers have made unverified claims of locating the wreck; none has materialized.

The Confederate ironclad steam gunboat Muscogee *was completed in December 1864 at Columbus, Ga., and burned by Union troops who attacked the city on 16 Apr 1865. The remains were recently raised and placed on exhibit as a Confederate Naval Museum in Columbus, under the custody of the Georgia Historical Commission.*

USS Cairo, *an ironclad river gunboat, was sunk 12 Dec 1862 while clearing mines in the Yazoo River. She has been located about 12 miles north of Vicksburg, Miss., and the state is now engaged in a project of raising and establishing her as a memorial.*

The Naval History Division, Department of the Navy, Washington 25, D. C., can provide you with a bibliography of naval history publications which can be obtained from the Superintendent of Documents, if you care to continue to pursue this subject.—ED.





Making a Molehill

REMEMBER that bright idea you had a few years ago? Something about "Why do we have to keep a log on this?" or "Why do we need this instruction?" You asked the chief, or one of the officers; and they smiled and told you that it had to be that way, that COM-someone-or-other required it. So you put your questions aside. After a while, you got used to spending an hour a day filling up that log, or whatever.

The time has come to take another close look at that log—and at your old idea. It may well be that your idea is a good one, that can be of benefit to a lot of other men like yourself. The Navy is looking for your idea, *RIGHT NOW*, in the largest effort ever undertaken to reduce the amount of burdensome—and unnecessary — paperwork throughout the Fleet. (Note those added words: and unnecessary.)

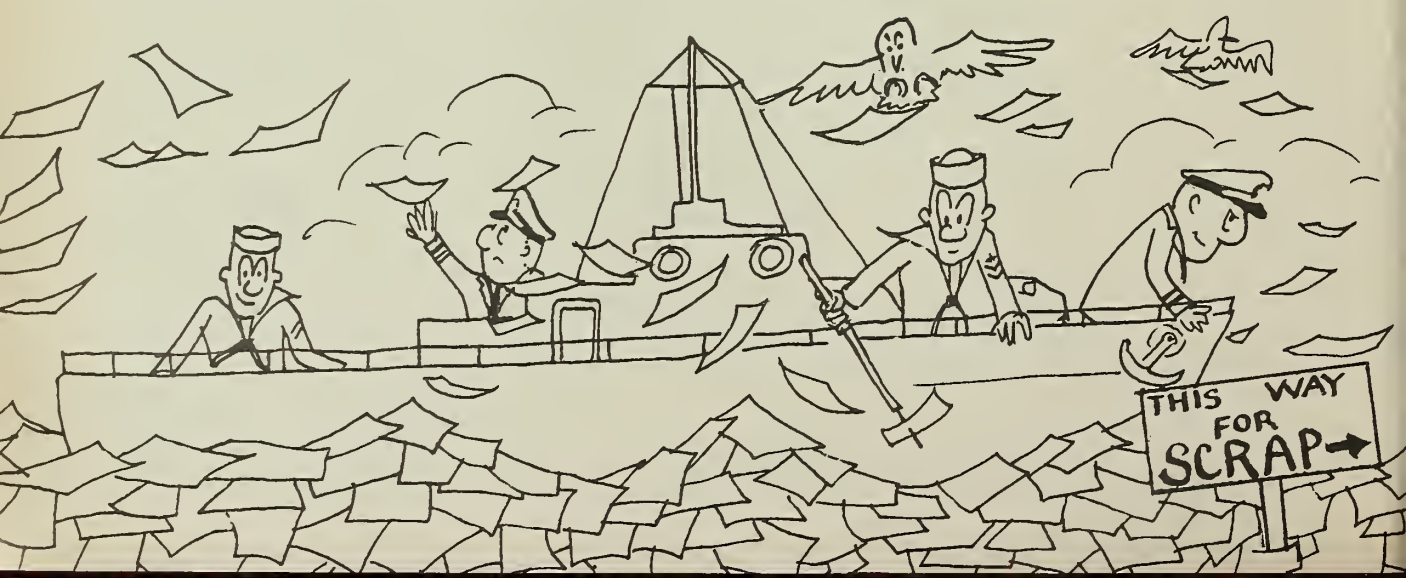
(Appropriately called *Project SCRAP*—the letters stand for "Selective Curtailment of Reports and Paperwork"—a vast program is getting underway, with all of the strength of the Department of the Navy behind it. But *Scrap* needs the interest and cooperation of every man and woman—officer, enlisted and civilian—connected with the Navy. Your interest, your cooperation. Your ideas.

The major and continuing goal of our Navy is to maintain combat readiness. Ready to fight, any time, anywhere—and fight to win. We won't win by throwing filing cabinets or checkoff lists at the enemy. And a man who is buried under the paperwork mountain has too little time for training, too little time to take care of his equipment. And too little time to relax and enjoy life.

HOW MANY evenings a week do men work late in your ship's office, engineering log room, supply office—just grinding through the paperwork?

The term "paperwork" takes in a lot of territory. Not only logs or reports, but correspondence, books, files, magazines, manuals, newspapers, plans, orders, procedures, instructions, notices. The tons of paper to be found on every ship and station that are crowding men out of their working spaces with sheer bulk; the care and feeding of which are crowding useful working hours out of the day.

The major and continuing goal of *Project Scrap* is to get rid of as much of that paperwork as possible. But it is more than a massive housecleaning; it is also an attack on the underlying philosophy that has crept





Out of a Mountain

into naval thinking and brought about the paperwork mountain.

An attack on the philosophy that refuses to accept results as proof of accomplishment, but requires excessive and oppressive documentation of each step along the way. One naval officer pinned it down nicely: It is "a blind fascination with administrative detail as an end rather than a means; a compulsive dedication to the word rather than the deed."

Project Scrap is directed right at the heart of the matter.

You won't see a lot of detailed instructions on *Scrap;* there won't be a pile of checkoff lists designed to check up on your ship's progress in getting rid of unnecessary checkoff lists. The *Scrap* drive, most fittingly, will be conducted with a minimum of paperwork. But you will be hearing a whole lot more about *Scrap*.

AND THE *Scrap* program, which is headed by the Naval Inspector General, will be hearing from you—he hopes. So do we. All commands are being encouraged to submit their suggestions—official and unofficial—to the *Scrap* drive. ALL HANDS is planning a feature, *"The SCRAP Heap,"* in which a lot of those ideas are going to be thrown. We'll publish the best letters received, along with pertinent comments by the Inspector General. Polish up your old idea—or work out a new one—and send it off to:

Project SCRAP
Naval Inspector General
Navy Department
Washington, D. C. 20350

Don't send your ideas to ALL HANDS; that would just delay their getting to the attention of the right people who could expedite matters.

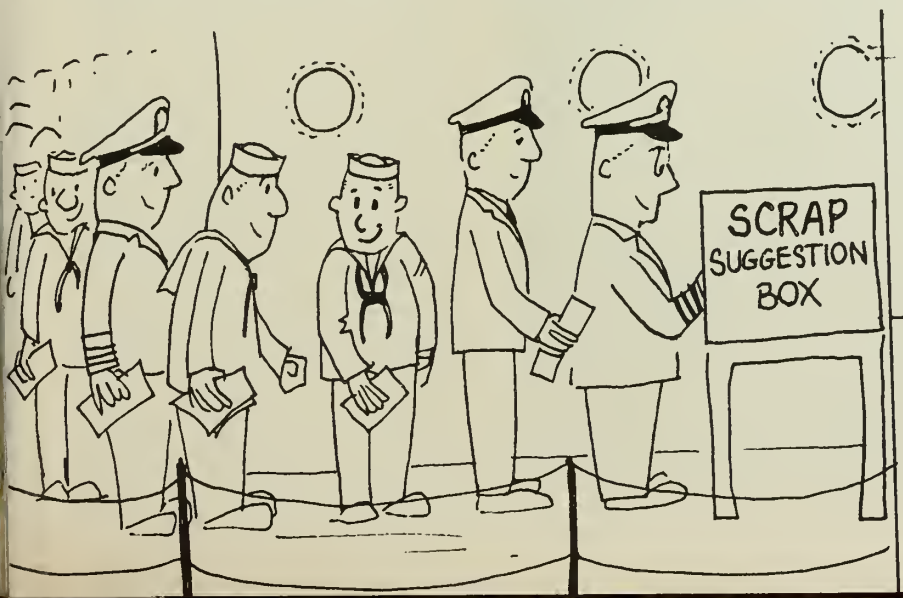
And don't hesitate just because you think "they'll never buy it." Look at some of the things "they" already have bought.

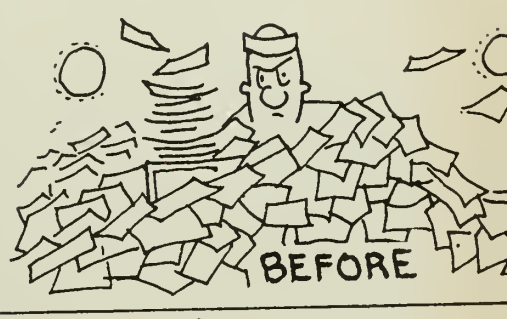
For example:

- The COMTAC libraries on ships, which contain many rarely used books and require constant attention to keep up to date, are being cut in half.
- The system of weekly hull reports is being drastically modified.
- And it is no longer necessary to type up the ship's log for submission to higher authority—just send in the handwritten signed original.

The SCRAP men estimate that over 600,000 man hours per year will be saved as a result of that last idea.

Scrap wants to hear your idea. It wants to make a molehill out of a mountain.







TODAY'S NAVY



A NEWCOMER—The fast combat support ship *USS Sacramento* (AOE 1), first of her class, is serving as unit of the United States Pacific Fleet.

Chief Knows the Answers

Training Squadron (VT) 28 in Corpus Christi, Texas, solved a problem. That was back in 1963, and the solution has been paying big dividends, both for the squadron and its men.

The word had gone around that about 80 per cent of all airman apprentices taking the advancement exam for airman weren't passing. To find out why, the Education Officer began interviewing those who didn't make the grade.

He discovered that most young sailors didn't know many of the terms used in the *Airman's Manual.* Also, many questions in the test were based upon shipboard duty—something the AAs knew very little about.

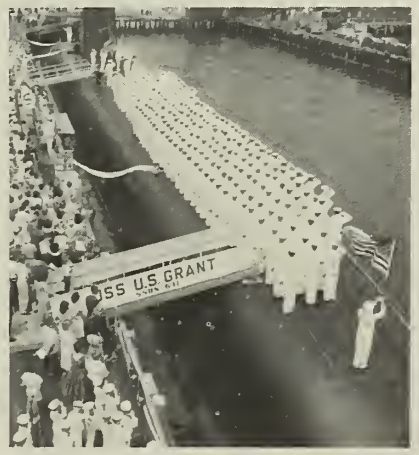
He put out a call for help to the senior petty officers of VT 28, and Anson L. Gray, ADR2(AC), responded. Gray set up a schedule of classes, prepared his lesson plans and began his coaching.

The results speak for themselves. Since early 1963, 150 men have attended; over 62 per cent of the students have passed the airman test on their first try.

As the only instructor, Gray volunteers his off-duty time every Tuesday and Thursday to coach his squadron mates. The school lasts for eight periods, each from two to two and one-half hours long.

Gray's normal working day is spent as an aircraft mechanic for the VT 28 power plants division.

Flying the TS2A *Tracker* aircraft, the squadron trains naval aviators in multi-engine aircraft, instrument flight and carrier qualifications.



FLAG RAISING—Crew and guests are on hand for commissioning of *USS U.S. Grant* (SSBN 631), the 22nd *Polaris* sub to join the fleet.

From the Keel Up

Across the country new ships are taking shape. Four have been launched, the keel was laid for a fifth and two others received their names.

At the New York Naval Shipyard, the fourth and fifth ships built from the keel up as amphibious transport docks were launched simultaneously. *Austin* (LPD 4) and *Ogden* (LPD 5) are 570 feet long and have a displacement of 16,600 tons fully loaded. Each carries a crew of 513 officers and men. *Austin* is scheduled for commissioning in November and *Ogden* in January.

On the West Coast at the Puget Sound Naval Shipyard in Washington, two guided missile frigates were launched simultaneously.

Jouett (DLG 29) and *Sterett* (DLG 31) are of the *Belknap* (DLG 26) class. They're 547 feet long, have a 54-foot beam and displace 7900 tons fully loaded. Their armament includes surface-to-air *Terrier* missiles, *Asroc, Dash,* 5-inch/54 caliber and 3-inch/50 caliber guns.

Also at Bremerton, the keel of the destroyer tender *Samuel Gompers* (AD 37) was laid. With her construction a new class of destroyer tender is on the way.

Gompers will be capable of providing supplies, repairs and support facilities for all destroyer type ships, including support of missile systems and antisubmarine weapons and equipment, advanced communications and electronic systems and nuclear propulsion plants.

She'll have a full-load displacement of 20,500 tons, a 644-foot length and 85-foot beam. Her armament includes a single 5-inch/38 caliber and six 50-caliber machine-guns for limited self-defense.

Names have been assigned to two ships currently under construction at Pascagoula, Miss.

The amphibious assault ship, LPH 10, was named *Tripoli,* while the submarine tender AS 34 was dubbed *Canopus.*

The keels for both ships were laid earlier this year. *Canopus* is scheduled for launching in February while *Tripoli* will be launched in July.

They Played It Safe, and Won

Seven activities within the Newport Naval Base, R.I., played it safe during 1963; each received the Secretary of the Navy's Achievement in Safety award.

The commands were: Naval Supply Depot, Public Works Center, Fleet Training Center, Naval Underwater Ordnance Station, Naval Station, Underwater Weapons System Engineering Center and the Commissary Store.

Presented annually to bureaus and shore activities, the awards represent achievement in all aspects of "industrial" and motor vehicle safety.

The Secretary's Office of Industrial Relations Safety Division determines which commands will be recipients. Each activity must perform at least 250,000 manhours of work to be considered.

Achievement in Safety awards are based on comparisons of activity, injury frequency and severity rates, and government motor vehicle accident rates, against established minimums and averages for different types of activities.

Jason Is Going for Thirty

The name Jason was sometimes described by the Greeks as meaning "wanderer," and the Jason known to us in Greek mythology did do some wandering—with a purpose. We best remember his journey to Colchis, leading a band of Argonauts to retrieve the Golden Fleece.

Today there's another Jason which can conquer all obstacles to meet a challenge—the repair ship USS *Jason* (AR 8). Though not accustomed to rescuing blind men from harpies or wrestling with fire-snorting bulls, *Jason* has spent 20 years performing equally miraculous repair jobs to Fleet ships.

While moored at Ulithi in the western Carolines during WW II, *Jason* mended broken hulls, buckled decks, twisted bulkheads and ruptured insides of carriers, battle wagons, cruisers, auxiliary vessels and landing craft and sent them back to the battle areas. In one four-week period *Jason* had 84 ships to repair.

The floating shipyard repaired and sent back to battle six major ships that had suffered damage from kamikaze attacks. The carriers USS *Lexington* (CV 16) and *Cabot* (CVL 28), damaged by the suicide planes, were repaired during one turn-about period which enabled them to resume their place on a scheduled operation in the battle area.



THAT-A-WAY—Catapult officer signals for plane to be launched from USS *Hancock* (CVA 19) the first launching since the aircraft carrier's overhaul.

During *Jason's* stay at Ulithi three enemy attacks on ships in the harbor took place. Harassed by the enemy and the weather, *Jason* carried on undaunted, sometimes working two 12-hour shifts, seven days a week to get ships back in service.

Jason later pulled into San Pedro Bay in Leyte Gulf, where she completely regunned USS *Mobile* (CL 63) and repaired the hulls of *Mississippi* (BB 41), *Idaho* (BB 42), *Mt. Olympus* (AGC 8) and *Gus W. Darnell* (IX 228).

Jason joined with occupational forces steaming for Japan and Korea at the close of the war. Later she returned to this area to render the same services during the Korean conflict.

Though repairs are the primary function of *Jason*, she is always prepared to assume a role as a fighting ship, as evidenced by the fact that she has won the battle efficiency award for her type ship the past three years. Even Jason could be proud of *Jason*.

BOW WIDE OPEN—USS *DeSoto County* (LST 1171) is prepared to receive visitors during the tank landing ship's stay in Toledo during Great Lakes tour.





OCEAN TESTER—*USS Marysville* (EPCER 857) is a specialist in measuring the ocean and testing the latest in electronic and oceanographic devices.

Not Every Ship Can Do This

The signal light on the huge aircraft carrier flashed across San Diego Harbor spelling out the message, "What do you do?" The answer blinked back from the 825-ton *Marysville*, "We measure the ocean."

Ask a silly question and you get a silly answer, the carrier men observed and went about their business.

But 20-year-old USS *Marysville* (EPCER 857) wasn't being flippant. Her job really is measuring the ocean or at least testing the advanced electronic and oceanographic devices which do measure the ocean.

Marysville was designed for World War II duty as a rescue patrol craft and, after the war, was converted to an experimental patrol craft capable of fulfilling her present duties.

It stands to reason that her equipment would be fairly unusual. For instance, she has one of the few thermistor chains in the world. A thermistor chain, in *Marysville's* case, is a 19-ton, 900-foot long linkage of steel and sensitive recording devices used to study thermal layers of the ocean, measure internal waves and record other oceanographic phenomena.

Nor is *Marysville* lacking in other oceanographic gear designed for collecting specimens and measurement data and listening to the sound of the sea—both above and below the surface.

Marysville is also equipped to test and evaluate various radio and antenna systems.

Whether she is in the southwest Pacific, in the arctic regions or comparatively close to home, *Marysville*, who can't qualify as the largest, or the smallest, can at least be safe in saying she is testing the latest.

Whitey Has Seen Most of Them

On board USS *Cascade* (AD 16) there is a 64-year-old chief storekeeper who, in a few months, will say goodbye to a Navy career which has seen him serving his country in two World Wars and the Korean conflict. His name is George Silsbee, better known to the men he serves with as Ole Whitey.

When Silsbee was an 18-year-old he joined the Navy as an apprentice seaman, but he was already a veteran sailor. Earlier he had shipped out of New Bedford, Mass., in *Wanderer*, a whaler which relied entirely upon wind and sail for propulsion. Although shore training prevented him from seeing action in the first World War, he was to become familiar with numerous types of ships.

Soon after the war ended he joined USS *Hopewell* (DD 181), a four-stack, coal-burning destroyer.

In 1919, the Chief transferred to *Eagle Boat 19* on what was to be the first of three such assignments.

The Eagle Boat was a prefabricated fighting vessel with a mission between that of a destroyer and a sub chaser. The boats were numbered, rather than named, and had about the same sort of armament as turn-of-the-century destroyers.

In 1921, the Chief received his discharge from the Navy and returned to New Bedford where, among other things, he served as a member of the New Bedford City Council.

During World War II, in 1942 to be exact, Chief Silsbee again offered his services to the sea service, and found himself in a ship bound for Argentia, Newfoundland, on the North Atlantic Defense Line. A year later, Silsbee was advanced to Chief Storekeeper.

In the spring of '44, the chief left Argentia and headed west for a billet in USS *Graffias* (AF 29) and, until 1945, he cruised the Pacific on board that support ship, backing up the U. S. island offensive.

By February 1946, the chief had boarded the Fleet oiler USS *Chuckawan* (AO 100) where he finished his enlistment in April 1947 and went back to life as a civilian.

Peace didn't last long, however, and Ole' Whitey again returned to the Fleet. In August 1950, he was bound for Asiatic waters aboard USS *Borie* (DD 704) to take part in fire support of United Nations land troops in the Korean conflict.

Silsbee's assignment to *Borie* marked the beginning of the last segment of his career. Since then, he has served aboard USS *Badger* (DD 657), *Grand Canyon* (AD 28), *Dealey* (DE 1006) and *Cascade*.

His shore duty was spent at Headquarters, Rhine River Patrol in Scheirstein, Germany; NAS Glynco, Ga.; the Sixteenth Atlantic Fleet Annex (mothball fleet), Boston; the Boston Naval Shipyard and NAS Quonset Point, R. I.

Chief Silsbee owns 10 campaign medals, which span history from the World War I Victory Medal to the Korean Medal, plus the Korean Presidential Unit Citation.

Speaking as one who knows the difference between the old Navy and the new, the chief likens the old four stackers to bunk houses, and modern destroyers to luxury hotels. He recalled the deck heat of early destroyers which could blister a sailor's feet, even on wood.

After he retires, Chief Silsbee plans on spending his winters in Florida and his summers in New England. He will probably buy a small boat just "to keep a hand in."



MANY THANKS—A Thai Seabee explains message on banner to U. S. Seabee at dedication ceremonies of Ban Nam Thieng Dam. It reads, 'We thank the U. S. Government for helping us develop the village.' Rt: *In Thai ceremony villagers honor Navy construction men of STAT 0901 for their assistance to that nation.*

USNSMSES Says Nemesis

The recently dedicated U. S. Naval Ship Missile Systems Engineering Station, nicknamed Nemesis, is one of BuWeps' newest field activities.

The mission of NSMSES is to provide technical and engineering assistance in matters relating to the operational use of shipboard guided missile weapons systems.

Located at the Construction Battalion Center, Port Hueneme, Calif., the station is under the military command of the Commander Pacific Missile Range, and under the management control of BuWeps.

NSMSES engineers are providing engineering support of the three T's (*Terrier*, *Tartar* and *Talos*) missile systems. They are also participating in the development of standardized maintenance procedures (such as the integrated maintenance plan), and working with shore activities and the Fleet to insure that the in-service surface missile systems are fully operational, and the ships' complements are capable of supporting and maintaining them.

High Point Hits High Spots

The Navy's first operational hydrofoil, *High Point* (PCH 1), has completed initial rough-water testing off the northwestern tip of Washington State. The 110-ton patrol craft tested her underwater wings in waves averaging five and one-half feet high.

The tests are part of a series to prove an antisubmarine warfare system which may counter some of the advantages gained by new highly maneuverable, high-speed submarines.

Providing her with a second mode of travel, *High Point* has stilts and subsurface wings, called foils, that lift the hull clear of the water. She can also operate for extended periods just like a conventional ship.

High Point is 115 feet long, has a 31-foot beam and, when flying on submerged foils, reaches speeds of more than 40 knots. Two 3000-hp gas turbine engines provide power for foil-borne operations. When not using the foils, she may use either the gas turbines or an auxiliary 600-hp diesel engine.

High Point is the largest operational hydrofoil craft using a wholly submerged foil system.

ON STILTS—*USS High Point* (PCH 1) moves out to sea off the coast of Washington State where the craft is undergoing various rough-water tests.



Building Submarines Is Their Business

ONE DAY a few months ago Portsmouth Naval Shipyard, Kittery, Maine, commissioned the *Polaris* submarine USS *John Adams* (SSBN 620), launched *Nathanael Green* (SSBN 636) and laid the keel for what is destined to become USS *Grayling* (SSN 646).

The time element was unusual (all three ceremonies were completed within two hours). But otherwise, the festivities were nothing new to Portsmouth. The yard has been in the submarine business for almost half a century.

It all began back in 1915, when Portsmouth was authorized to build the submarine torpedo boat *L-8*. Although a number of similar boats had been previously constructed by commercial shipyards, records show that never before had a sub keel been laid in a Navy yard. Portsmouth was to be the first.

No one seems to know why Portsmouth was singled out to build *L-8*. But, since it had been, the yard became the logical choice for similar assignments in the future. Portsmouth had experience and facilities available at no other Naval shipyard. It probably surprised no one when the contract for the second Navy-built sub, the *O-1*, also went to Portsmouth. As time passed, the yard built a reputation as the Navy's number one sub-builder.

Through the years, the submarine construction operation was streamlined and, when World War II began, Portsmouth was launching submarines at the rate of two a year.

IMMEDIATELY after Pearl Harbor was attacked, the Portsmouth work force was increased and split into three shifts; construction continued day and night. Near the end of the war, over 20,000 persons were employed at the yard.

Between 1941 and July 1945, 79 Portsmouth submarines were sent to sea. Peak production had been 32 submarines commissioned during 1944.

Among the Portsmouth boats are familiar names: USS *Snook* (SS 279), credited with sinking 75,473 tons in the Pacific; *Seawolf* (SS 197), 71,609 tons; *Bowfin* (SS 287), 67,882 tons; *Archerfish* (SS 311), 59,800 tons, including the Japanese carrier *Shinano; Drum* (SS 228), which sank 15 ships; and *Kingfish* (SS 234), credited with 14 kills.

After V-J day, submarine production was cut sharply, but rose once more due to the Cold War and finally, Korea.

Since 1952 Portsmouth has played a major part in the development of modern submarines. The yard constructed USS *Sailfish* (SSR 572) and *Salmon* (SSR 573), the first Navy submarines to be built from the keel up as radar pickets. A number of attack submarines were also converted to high speed snorkel types.

In 1956 Portsmouth began to make the change from conventional to nuclear-powered submarines. In January of that year the yard workers laid the keel for the nuclear submarine USS *Swordfish* (SSN 579). A few months later construction began on USS *Barbel* (SS 580), the last of her non-nuclears.

SINCE THE SWITCH to atomic power, Portsmouth has commissioned (in addition to *Swordfish*) USS *Seadragon* (SSN 584), *Thresher* (SSN 593), *Jack* (SSN 605), *Tinosa* (SSN 606), *Abraham Lincoln* (SSBN 602) and the latest, *John Adams* (SSBN 620).

It stands to reason that Portsmouth has undergone some drastic changes in the past few decades. This may, of course, be seen in the yard's modern facilities and equipment, but it is most obvious in her changed product—The submarines she builds.

That first boat, *L-8* was a complicated piece of machinery for her day. She was 165 feet long and almost 15 feet wide. Displacing a total of 524 tons submerged, she was designed to face the enemy with eight small torpedoes and one topside three-inch gun. The boat carried two officers and 26 enlisted men.

The 1964 version of a submarine is quite different. *John Adams* is over twice as long as *L-8* and weighs 16 times as much. Four times *L-8's* crew is required to operate *John Adams*. She carries, in lieu of torpedoes, 16 *Polaris A-3* missiles, capable of rocketing a nuclear payload 2500 miles.

Portsmouth Naval Shipyard, which once specialized in boats, now builds ships.

Versatile *Vigilante*

A reconnaissance version of the A-5A *Vigilante* attack aircraft is now in operation, along with its own shipboard CIC. The combination aircraft and evaluation center is called the integrated operational intelligence system (IOIS).

The *Vigilante* modification, designated the RA-5C, is equipped with panoramic cameras and radar gear which scans to the side as well as in front of the aircraft. The information collected by the recon *Vigilante* is radioed back to a special evaluation center aboard ship, providing the tactical commander with intelligence information on any area. Other systems are also used for the same purpose, but IOIS does it faster.

The modification of the *Vigilante* has not sacrificed any of the A-5A's capabilities. When not in use as a recon plane, the RA-5C can still be used to deliver nuclear or conventional weapons with the same success as the A-5A. Either type can perform day or night, in almost all weather.

Reconnaissance Attack Squadron Five was the first unit to deploy overseas with the new type of aircraft. They recently left for the Western Pacific aboard USS *Ranger* (CVA 61).

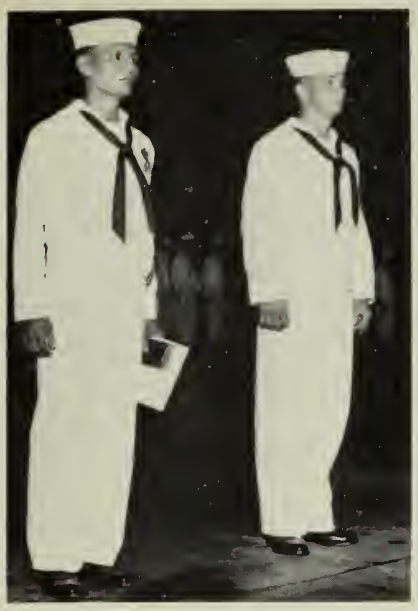
Sunday Painter Strikes Oil

A portrait in oil by a Navy painter was presented early this summer to the Industrial College of the Armed Forces at Fort Lesley J. McNair by its Alumni Association. The artist—Lester J. Stone, CAPT, USN, who is also the Bureau of Naval Personnel's Inspector General.

The portrait is that of General Eisenhower which Captain Stone painted from a composite of photographs taken during 1947. The General is shown wearing the famous Eisenhower jacket and the ribbons of the Army and Navy Distinguished Service Medals and the Legion of Merit. The five stars of a General of the Army are on his shoulders.

Captain Stone has never had formal training in art but has been painting in oils during much of his life, specializing in portraits.

He took special pleasure in doing the portrait for the Armed Forces Industrial College inasmuch as he is a 1957 alumnus.



REWARDING—P. B. Sapanza, SK2, *(left)* and W. A. Peterson, AA, of NAS Glynco, Ga., receive Navy and Marine Corps Medal at inspection.



WELL DONE—Airman Lawrence K. Carlos of USS *Ticonderoga* (CVA 14) is commended by his commanding officer for saving life of shipmate.

Marines Jump for Record

Nine Marine parachutists have claimed a new world's record for seven- eight- and nine-man teams for night jumping. The Marine skydivers opened their chutes at 1800 feet and floated to the ground after free-falling from 44,100 feet.

Beginning preparations in May, the Marines made the night jump early in June at Fort Bragg, N. C.

The parachutists stepped out of the KC-130F *Hercules* aircraft transport into a 65-degree-below-zero sky. Flares were ignited by the jumpers at 20,000 feet to mark their position during the free-fall. At 5000 feet another flare was fired. In the drop zone, ground crewmen marked the area by igniting flares to guide the jumpers.

The Marines don't have a record yet. The jump must be confirmed by the Parachute Club of America and the Federation Aeronautique Internationale before it can be officially recognized.

When the Marines' record is confirmed, they will have, in effect, three in one. It can only be broken by another nine-man team.

The current seven-, eight- and nine-man team record was made in 1961 by Russian parachutists jumping from 41,500 feet.

For more information on skydiving see the May 1964 ALL HANDS.

Chief Can Point With Pride

Chief Steward Ralph Churchwell is just about proud enough to bust all his buttons.

The 27-year Navy veteran recently saw his younger son, Ralph, graduate from the Officer Candidate School, Newport, and commissioned as ensign. Chief Churchwell's other son, John, a second lieutenant in the Air Force, was also present for the ceremonies.

Both sons are graduates of Tennessee Agricultural and Industrial State University in Nashville. John is stationed in Texas, while Ralph has been assigned to the radar picket ship USS *Lookout* (AGR 2).

Chief Churchwell enlisted in the Navy in 1937 from his native state of Tennessee. With his present assignment aboard USS *Yosemite* (AD 19), he has served in 13 ships of all categories.

His decorations and medals include: Presidential Unit Citation, American Theater, American Defense, Philippine Liberation and the Good Conduct Medal with eighth award. He also was awarded the Purple Heart for injuries received when his ship, the light cruiser USS *Atlanta* (CL 51), was sunk off Guadalcanal in 1942.



SON DAY—Chief Steward Ralph Churchwell, a veteran of 27 years of service, welcomes his recently commissioned officer sons aboard USS *Yosemite* (AD 19).

THE WORD

Frank, Authentic Career Information
Of Special Interest—Straight from Headquarters

• NEW RATING — There's been a change in the enlisted rating structure. A new rating of Communications Yeoman (CYN) has been established for pay grade E-4. If you're a seaman (E-3) and want to strike for yeoman, you can advance to YN or CYN.

Your job as a CYN will include duties in communications offices, such as logging, routing and filing messages. You'll also keep communications publications up to date, be a registered publications clerk and operate and control radio-telephone and radio-teletype equipment.

The first Navy-wide examination for advancement to CYN3 will be held in February for regulars and reservists on active duty; inactive-duty personnel will have a chance at the test in July.

The normal advancement path from CYN3 will lead to YN2. But if you want to change, and are qualified, you'll be considered for advancement to RM2.

You don't have to fill out a correspondence course; there aren't any in print—yet. However, the course and training manual will be ready about the beginning of 1966.

Meanwhile, the *Study Guide for Communications Yeoman* (NavPers 10034) and the YN/CYN3 qualifications for advancement in rating (practical factors) are available. You'll find both at your Education and Training Office.

If you are already a YN3 and are thinking of changing over—forget it. Since CYN terminates at E-4, change-in-rate requests will not be approved.

Now is as good a time as any to start preparing for the February exam. Briefly, here's what you must know. For more detail check the study guide and the YN/CYN3 qualifications for advancement.

- You must be eligible for (but not necessarily have) a security clearance for at least secret.
- You must know office and communication procedures, such as filing, handling supplies and keeping logs.
- You must be familiar with automatic teletypwriter equipment and know how to operate it.
- You must type at least 25 words per minute for five minutes.
- You must be familiar with various reports, publications, records and security procedures.
- You must know how to prepare official correspondence.
- You must be familiar with all phases of handling message traffic.
- You must know how to perform basic maintenance on the different office and teletype machines with which you work.
- You must know how to rescue a person from an energized electrical circuit, be able to perform mouth-to-mouth resuscitation of a person unconscious from electrical shock and know how to treat electrical and acid burns.
- You must know how to fight electrical fires.

It goes without saying that you must be eligible to advance to E-4.

BuPers Notice 1440 (26 June), which authorizes the establishment of the rating, also contains the YN/CYN3 qualifications for advancement in rating.

• AIRCREWMAN CERTIFICATES—Navy Aircrewmen have recently been (or soon will be) receiving a standardized Aircrewman Certificate designated as NavPers Form 4044.

The standardized certificate will replace those which have been developed by a number of local commands for award to all Navymen who qualify and are designated Aircrewmen.


United States Navy

AIRCREWMAN CERTIFICATE

This Certifies That

HOWARD K. DOE, 123 45 67, AMCS, USN

Having Fulfilled Established Requirements is Hereby Designated an Aircrewman

Qualified as Flight Engineer P3A This 5th day of June 19 64

Patrol Squadron SEVENTY-FIVE (VP-75) — J. B. ROBBEN, COMMANDER, U. S. NAVY

The certificates were made available through Cognizance "I" stock points last month and are being awarded by commanding officers.

• OBLIGATED SERVICE—A revised policy concerning voluntary resignation by Regular and Reserve Navy officers on active duty has been published. Changes include a cutdown on the paperwork involved in processing a resignation request—thus speeding up the process—and an extension of obligated service requirements for certain officers. The new Instruction on this subject—SecNav Inst. 1920.3D—has also been broadened to include some other ex-



ALL HANDS IS NOT FOR THE BIRDS so take care of it and pass it on . . . there are nine others waiting for this issue.

isting regulations which previously were published in different instructions.

Principal changes in the new instruction include:

- A requirement for Naval Academy graduates to serve a five-year active duty term, which supersedes the previous four-year obligation. This conforms to Public Law 88-276, passed this spring, and applies to all midshipmen appointed to the Academy after 3 Mar 1964.
- A requirement for officers who accept scientific, literary or educational scholarships, fellowships or grants, to serve a three-to-one ratio of active service—three times the instruction or training period—after completing such training.
- A similar three-to-one obligated service requirement for officers who participate in special graduate education leading to a doctorate degree immediately following undergraduate education and commissioning. Selected Naval Academy and Regular NROTC midshipmen are assigned to this program.
- A requirement for officers who have received tuition aid at government expense for off-duty courses to serve two years after completing the courses.
- The policy governing early outs for officers entering or returning to college—incorporated in this instruction for the first time.
- The new method for channeling resignation requests, doing away with the requirement to forward resignations through the normal chain of command. Now, the resignations are sent to the Secretary of the Navy via only the officer's commanding officer, chief of the appropriate sponsoring bureau or office (in the case of Restricted Line and Staff Corps officers), and the Chief of Naval Personnel.

The instruction states, however, that information copies of resignations may be sent to other seniors in the chain of command, if required by them, to allow for additional comments and recommendations.

This revision is aimed at reducing paperwork, and simultaneously serves to speed up the processing of a resignation.

One other major change in the new Instruction is omission of the section on voluntary termination of temporary officer and warrant officer appointments. The policy pertaining to these categories has been clarified (but not substantially changed) and published in a separate directive—SecNav Inst. 1920.5.

The Instruction sets forth the policy governing voluntary resignation of all male, women and Nurse Corps officers, including hardship cases, and should be referred to for further details on the subject.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions and BuPers Notices that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices

Instructions

No. 1020.11C—Sets forth the policy and instructions for providing clothing to enlisted Naval Reserve members who are ordered to extended active duty or discharged for immediate enlistment in the Regular Navy.

No. 1050.2E—Provides information concerning the conditions under which personnel of Philippine or Guamanian extraction may visit the Republic of Philippines or Guam.

No. 1120.18J—Outlines the eligibility requirements and processing procedures whereby USN personnel may seek appointment to warrant or commissioned status through the integration program, the warrant officer program and the limited duty officer program.

No. 1540.40—Discusses qualifications and assignment policies of those ordered to duty in connection with naval nuclear propulsion plants.

No. 1560.2—Amplifies and gives effect to the requirement that the national anthem motion picture trailer be shown before all entertainment motion picture exhibitions.

Notices

No. 1440 (26 June)—Announced a change in the Enlisted Rating Structure which established at pay grade E-4 the rating of Communications Yeoman (CYN) as a service rating of the Yeoman general rating.

SecNav 1421 (6 July) — Announced the convening of boards for the selection of active duty lineal list, Line and Staff Corps officers and USN Line and Supply Corps women officers for promotion.

No. 1221 (10 July)—Directed mandatory assignment of entry trainee NECs.

QUIZ AWEIGH

Ship silhouettes have undergone some drastic changes in the past few years. If you were standing a lookout watch, how would you identify the following profiles?



1. This one is the second of her class, but her appearance bears little similarity to the first. She is a/an:

(a) Auxiliary aircraft transport.
(b) Command ship.
(c) Major communications relay ship.



2. A combination mast and stack (MACK) is one of the new features of this type. Built on a heavy cruiser hull, she is a:

(a) Guided missile heavy cruiser.
(b) Guided missile command ship.
(c) Guided missile cruiser.



3. The first ship of this type was commissioned in September 1962 and five more will have joined the Fleet by 1966. What is it?

(a) Amphibious transport dock.
(b) FBM submarine tender.
(c) Amphibious force flagship.



4. Although she was launched in 1945, this ship did not become part of the Navy until 1953. The oddball bow is your best clue. She's a:

(a) Netlayer.
(b) Cable repair ship.
(c) Submarine rescue vessel.

Answers to Quiz Aweigh may be found on page 54.

THE BULLETIN BOARD

Answers to Your Questions on Family Separation Allowance

THE FAMILY Separation Allowance (FSA) is designed to help you foot the extra bills incurred when you're away from home performing your military duties.

There are two types of FSA. Type I applies to relatively few men, and will be explained later. Type II, in contrast, will sooner or later mean extra money for almost every Navy family. It amounts to $30 per month, and is paid to help you meet the additional expenses of home upkeep while you are away.

Before you can collect Type II FSA you must meet a number of requirements. The reasoning behind some of these may seem obscure unless you understand the basic intentions of the law.

Those who laid the ground rules for Type II FSA were thinking in very down-to-earth terms—about such things as leaking water faucets, for example.

Now, a dripping tap is absolutely no problem for any self-respecting brownbagger. You'd simply arm yourself with a pipe wrench and screwdriver and turn to. Presto: problem solved, and it would cost you just a few cents for the washer.

On the other hand, if that same tap began to leak while you were attached to USS *Boat*, somewhere in WestPac, it would be a different story altogether. Unless your wife can wear your coveralls the solution would involve a visit from the local plumber. This usually costs more than a few cents.

FSA Type II, then, is meant to help you pay the plumber, or the carpenter, or the exterminator, to do something you would have done yourself had you been present. Keep this in mind as you read the following general requirements for Type II FSA.

- You must be receiving BAQ.
- You must maintain a residence. Technically, a residence is a home which you would normally share with your dependents while on leave or liberty. (This automatically eliminates the claims of Navymen who are legally separated or divorced, even though they help support their wife, ex-wife, or children in the wife's custody.)
- You must be separated from your family for a period of 31 or more days. (Most small repairs could wait at least 30 days for your return.)

The Navy will usually consider you separated from your family if you are over 50 miles from your home station (home port for shipboard sailors), provided you don't commute home on a daily basis. You will also be considered separated if you are serving an overseas shore tour without dependents.

Visiting will not interfere with your separated status providing you (or your family) do not stay longer than a specified time. You may visit your home occasionally, but not on a daily basis. If you are on sea duty and away from your home port, or on TAD or temporary duty orders, your family may visit you for no more than 30 consecutive days. If you are serving an unaccompanied overseas shore tour, your family may visit you for not more than three months.

These limitations do not apply if only part of your family visits you. In other words, if your wife visited you but left the children at home with grandma, there would be no time limitation—after all, you'd still be maintaining a home which you could not repair yourself.

- You will be ineligible for Type II FSA if your family lives in Navy housing. FSA is meant to offset maintenance costs, and Navy housing is maintained free of charge by the government.

This applies only if you are not receiving a BAQ allowance. If you live in Navy rental housing and pay your rent directly as though you were in civilian housing, you will probably be eligible for the $30 per month extra, providing you are otherwise qualified.

- The Navy must be responsible for your separation.

Originally, this meant that your family had to live in your home port while you were overseas with your ship or unit—this qualification has been dropped. However, you still can't collect FSA if your unit is in its home port or station, regardless of the location of your family.

As an example, take the case of Chief Smith, who is on shore duty with his family in Norfolk, Va. He has orders to report to a destroyer in Brooklyn, N. Y.

Because his children are in school, he decides to leave his family in Norfolk and go to Brooklyn alone. He will not be entitled to FSA because the separation was of his own choice.

But when his ship leaves Brooklyn for more than 31 days, he becomes entitled to FSA because he would be separated from his family regardless of his previous decision.

The single exception to this rule concerns those men who are serving on overseas shore duty and elect the short, unaccompanied tour. These men are eligible for Type II FSA.

- You will not be paid FSA if your family would be separated from you anyway because they were ineligible for government travel, because you were not in an eligible pay grade. This means you must be E-5 and above, or third class with more than four years in service.

If you meet all the above quali-

All-Navy Cartoon Contest
William R. Moul, CT1, USN



"One more thing to remember—you hove to learn to grow in the job."

fications, you will probably be entitled to receive the Type II Family Separation Allowance. Keep in mind, however, that, regardless of how you look on paper, you cannot collect FSA if you are in reality living with your family on the same basis as if you were on shore duty in your home area.

Incidentally, FSA Type II will usually continue if, while you are separated, you are further ordered to TAD, temporary duty, hospitalization, military confinement, or take leave. It is not payable if you go directly from your home station to hospitalization or military confinement, since you are not ordered to duty. There is, however, a restriction if you return to the area where your dependents are residing for TAD or hospitalization.

Type II FSA is further subdivided into three categories, which apply mostly to administrative types. They are: FSA-S (for shipboard separations); FSA-T (for Navymen on TAD or temporary duty); and FSA-R (primarily for those who are serving unaccompanied tours overseas).

Type I FSA, which was mentioned briefly in the beginning, is for those married men who are serving unaccompanied overseas shore tours at a location where there are no government berthing facilities.

These men are forced to maintain two homes: One for their families back in the States and another for themselves near their duty stations. In the past they could receive only one quarters allowance—their BAQ payment.

Now, under Type I FSA laws, if you end up in such a situation you'll make out fine—you'll receive your standard BAQ payment for your family in the States, plus another monthly sum equal to the BAQ allowed for a single man in your pay grade. Furthermore, you may also be eligible for the $30 per month Type II allowance for the maintenance of your stateside home.

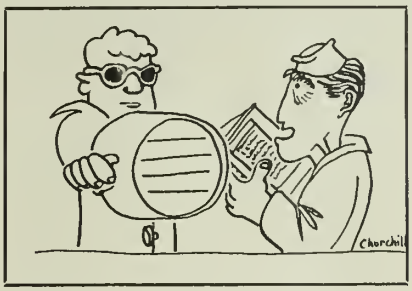
Your choice to serve without dependents will not disqualify you for this type of FSA. If you are married, select a short unaccompanied tour overseas, and must maintain a residence near your duty station due to lack of government facilities, you will be eligible.

Visiting restrictions are more lenient for Type I than for the FSA-S and FSA-T allowances under Type II. If you are receiving the additional BAQ payments, your entire family may visit you for as long as three months without endangering your FSA. However, if your dependents plan to remain more than three months you are expected to notify your disbursing officer so that he may stop the payments on the day they arrive near your station.

As before, these visiting restrictions only apply when you are visited by your entire family. If a dependent remains behind, there are no restrictions.

SecNav Inst. 7220.46 is the implementing instruction.

All-Navy Cartaan Cantest
Robert E. Churchill, RDSA, USN.



"Wait a minute, Charlie, I dan't think all af the trauble is in their transmitter."

Freedom Foundation Contest Stresses the Right to Vote

Voting is the theme for the 1964 Freedoms Foundation Essay Contest. The Foundation is offering 101 cash prizes from $50 to $1000. The contest opened in April and will close on 1 November.

All servicemen and women on active duty are eligible to compete. Entries should be in letter form, between 100 and 500 words long, titled *My Vote: Freedom's Privilege*. Send entries to Freedoms Foundation, Valley Forge, Pa., postmarked no later than 1 Nov 1964.

First prize is $1000. There are also 50 $100 awards and an equal number of $50 prizes. The winner in each service will be invited to attend the presidential inauguration.

The official rules for the contest may be found in SecNav Notice 5720 dated 18 Jun 1964.

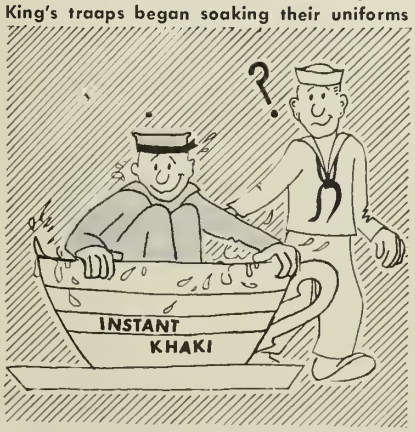
HOW DID IT START

Khakis Started When They Had to Hit the Dirt

Khaki unifarms made their debut in the Marine Carps in 1900 and in the Navy at least as early as 1912, when they were worn by naval aviators warking and flying during fleet maneuvers at Guantanama Bay, Cuba. But khakis originated about 1845, when the British were fighting in India.

The stary gaes that the English saldiers, in their flashy white or blue unifarms, made fine targets far snipers.

A neat appearance is admirable, but it can be sacrificed—particularly in the cause of self preservatian. Quite understandably, the King's traaps began soaking their uniforms in mud, caffee, curry powder—anything to blend in with the landscape.



Khaki, in Hindi, means earth-calared.

In 1882 the British Army afficially adapted a khaki warking unifarm. A few years later they made it the liberty unifarm as well, but the Tammies would have no part of it. They pratested sa loudly that the Army returned ta more colarful garb, at least for liberty.

In time, many cauntries adopted khaki far the warking and fighting unifarms. U. S. saldiers first ware them while fighting in the Caribbean during the Spanish American War.

Althaugh Navy pilots have warn khaki since the beginning af naval aviatian (it was made an afficial unifarm in 1917), the blackshoe Navy was happy enough with what they were wearing and did not adopt the new calar far 30 years. It was finally authorized for an-station wear (when approved by the seniar afficer present) in January 1941.

A few manths later the U. S. Navy was fighting in bath the Atlantic and Pacific Oceans.

Unifarms became less farmal in wartime, and saan after Pearl Harbar chiefs and afficers were autharized ta wear khakis ashare on liberty.

Report on the Philippines for the Navyman and His Family

SOONER OR LATER in their careers, most Navymen have the opportunity of visiting the Philippines, and many of them will have the experience of serving on duty in this republic in the Pacific.

An archipelago of more than 7,000 islands, the Philippines is an important bastion in the defense of the free world, and works closely with the other democracies for mutual defense.

The United States today maintains five bases in the Republic of the Philippines—all on the island of Luzon and fairly close to Manila. These are Clark Air Force Base, and four U.S. Navy installations: Naval Base Subic, Naval Station Sangley Point, Naval Air Station Cubi Point which is close to Subic Bay, and the Naval Communication Station Philippines at San Miguel.

Here is a report on living conditions for the Navy family assigned to duty at one of these bases.

The Manila area is close to sea level and the climate is tropical. Daytime temperatures average from 86 to 94 degrees throughout the year.

Although there are no abrupt or very definite changes, the year is roughly divided into three seasons. Lowest minimum temperatures occur during the cool season, from December to March, when the maximum is normally 85 degrees, the minimum 70 degrees. The hot season lasts from March through June when the daily peak is 90 to 95 degrees, with May as the hottest month. The rainy season is from July through October when as much as 13 inches of rain may fall in a single day. In general, humidity is high year-round.

In general, when planning travel to the Philippines, you should check early on immunization requirements. Applications for passports and visas should also be made well in advance. Conditions vary among the several naval installations and local situations may develop which will affect individuals en route to their assigned areas. Hence, you are urged to maintain close liaison with your sponsor so that up-to-date and detailed information may be obtained before arrival.

Education—American schools through high school level are available and offer educational opportunities comparable to those found in public schools in the States. Both the University of the Philippines and the University of Santo Tomas are accredited to American colleges.

Automobiles—Private automobiles are the usual conveyance. Roads vary in quality and you'll find it worthwhile to have a sturdy car in good condition. Roads are heavily congested in the Manila area. In the small villages the roads are also used by pedestrian traffic; therefore, slow and careful driving is required.

Gasoline is not rationed and costs about 18 cents a gallon through Navy Exchange stations. Mechanical and body repairs can be obtained, but tire and battery replacement is difficult. Since the climate is hard on automobiles, undercoating is highly recommended.

Clothing—The Navy Exchanges are usually well stocked with sheets, towels, and dress materials, but some items might occasionally be in short supply or not available. There is little ready-to-wear in stock, but many dressmakers of varying talents sew inexpensively.

Navy Exchanges also operate tailor shops. Summer clothing is worn the year round, but bring spring and fall dresses and lightweight suits for wear at the mountain resorts at Baguio, and for trips to Hong Kong or Japan.

Bermuda shorts and pedal pushers are acceptable daytime wear. "Short shorts" are not considered good taste in public. Sleeveless shirts and blouses are comfortable. Simple cotton dresses are good any time. Dark cottons and synthetics mixed with cotton are good for shopping or traveling.

The dacron, nylon and orlon materials are warm for daily use, but useful for traveling. The wrinkle-resistant cottons are also useful, but lose their resistance after they are washed, wrung, starched and ironed a few times.

Three times as much summer clothing will be needed during a tour here as is needed for a normal tour elsewhere; however, do not buy a tremendous supply as dressmakers are available. Special purchase orders may also be made through the Navy Exchange. This service is fast and inexpensive.

Shoes wear quickly, especially during the wet season. All types of leather and plastic heels can be worn at one time or another. The low heel, play shoe or sandal is most comfortable for daytime wear.

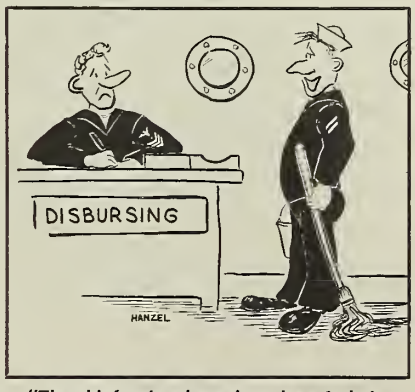
Each member of the family should have a pair of lightweight overshoes and a raincoat. Extra umbrellas can be used to good advantage, both for sun and rain. Hose are seldom worn, except at formal functions and when traveling. Seamless, nylon mesh hose are good for traveling. Ordinary wear hose are available locally.

Brand name commodities from U. S. sources can be bought through the Navy Exchange special order section. Jade jewelry or imported linens purchased in the States should be declared when passing through customs, otherwise these may be considered contraband items and impounded when returning to the States.

Girls' Clothing—Local dressmakers do very well on children's clothing and charge from $1.25 to $2.00 for a dress. Girls wear dresses to school and pedal pushers and shorts for play. The Brownies and Girl Scouts are very active, but uniforms have to be ordered from the States. Swimming lessons are given by the Red Cross the year round and extra bathing suits are needed. Shoes for children are sometimes a problem. The Exchanges carry them but correct sizes are not always in stock.

Boys' Clothing—Boys from first grade through high school wear khakis, blue jeans or long cotton wash pants. Sport shirts or cotton light-

All-Navy Cartoon Contest
Joseph J. Honzel, AE3, USN



"The chief ordered me down here to help cleon out the poy records."

weight knit shirts are worn for school and white shirts or white shortsleeved sport shirts are worn for dress and church. Suits are not necessary.

Men's Clothing—White and khaki cotton uniforms, including shorts and shortsleeved shirts are worn for duty. These are available at service sales outlets or may be custom tailored at very reasonable prices. You are encouraged to wear the tropical white uniform (shorts and shortsleeved shirts, with long white socks) and its alternate, tropical white long. Civilian clothes are authorized for off-duty wear. Excellent woolens are available through the Exchanges while other materials are slightly above stateside prices.

Domestic Help—Families with one or two children usually have a housegirl who does the laundry and cleaning and looks after the children. Larger families and those who do entertaining generally have two girls, a lavandera who does the laundry and a cook who usually also does the cleaning. A lavandera is usually paid about 40 pesos ($10.50), a housegirl 50 to 60 pesos and a cook 60 to 65 pesos per month. Part-time housegirls are paid about 10 dollars a month for working three days a week. Maximum wages are set by regulations and must be observed.

Food—Commissaries and Navy Exchanges carry most food to which Americans are accustomed. Local markets are stocked wtih many kinds of tropical fruits as well as familiar vegetables. As all meats are frozen, it is desirable to have a freezer. Stores in Manila offer a wide variety of foods, but prices are high.

Medicol ond Dentol Core—Hospitals or dispensaries are available at all stations and provide routine medical care and limited dental care for dependents. Persons wearing glasses should bring an extra pair although glasses may be obtained inexpensively in Hong Kong or Manila. Special prescriptions may not be available in the area and arrangements should be made for re-ordering. Orthodontic treatment may be obtained on the station by an orthodontist from Manila. The fees are nominal and paid by the patient.

Religion—Protestant and Catholic services are held at all station chapels. The Philippines is predominately (nearly 80 per cent) Roman Catholic, but services of almost all denominations can be found within the Manila area.

Money—U. S. currency (green) is used on U. S. bases. Elsewhere in the Philippines the Philippine monetary unit—the peso—is used at world market exchange rate, currently P3.88 for $1.00. Conversion of pesos to dollars at naval facilities is controlled and a record kept of all transactions. There are no banking facilities aboard any naval installation and it is wise to maintain a checking account in the States.

Recreotion Focilities—A number of golf courses are located on or near the naval bases and fishing, boating, swimming and picknicking are available. Due to the somewhat isolated location of some of the bases, U. S. personnel lead a close-knit life that leads to considerable family-type social entertaining. There are clubs for enlisted personnel, chief petty officers and officers on all bases.

Camp John Hay, at Baguio in northern Luzon, is a recreational center for the Far East operated by the U. S. Air Force and is available to Navy families. It is a mountain-resort that offers golf, fishing and other outdoor activities in a cool and pleasant atmosphere that is a welcome respite from the normal heat and humidity of most areas. Some cottages are available which enable families to enjoy conditions similar to those of a mountain resort in the States.

Sangley Point

Housing—The limited housing available is about half permanent and half of a temporary type, but adequate and comfortable. Most temporary quarters are converted quonsets. There is an average waiting period of 12 months based upon a priority system.

Entry clearance and concurrent travel of dependents must be requested from ComNavPhil and will not be granted until a sponsor is assigned and on-base housing or private rental off-base is arranged. Civilian housing rents for about $50 per month excluding utilities and must meet specified standards before you are authorized to rent.

Furniture ond Applionces—Furniture for off-station housing can be rented from local sources for approximately $20 per month for a two-bedroom house with living room, dining room and maid's room. Stove and refriger-

WHAT'S IN A NAME

No Swimming in this River

In some ploces, picnickers like to go up o lazy river ond relox os the woter flows dreomily by.

In Antarctico, however, things ore different. To begin with, the weother, even in summertime, isn't conducive to picnics. In the second place, it's difficult to tell when you get to o river.

During Deep Freeze '64, o porty trekked for 92 doys in Sno-Cot troctors from Byrd Stotion toword the Weddell Sea in search of on "ice river." They thought its existence might help exploin the comporatively rapid flow of the ice shelf at the heod of the Weddell Sea.

The explorers found their clue to the existence of such o river when they detected o norrow bond of ice which wos three degrees colder than the surrounding ice.

To an experienced Antarctic river hunter, this indicated the ice hod originoted in o colder portion of the continent—nomely, the polar ploteou.

The porty made seismic soundings to ascertoin whether or not there wos o trough under the ice similor to o river bed in other climes. Then they drove o network of stokes into the snow by which they hope in the future to check the speed of their newly discovered ice river.

The speculation wos thot the river might flow at the rote of 600 feet per yeor. In Antarctica this might be considered o tumbling torrent; ofter oll, the entire ice-cop moves only 50 feet eoch yeor.



ator rental is extra. It is best to ship electrical appliances as well as enough furniture as soon as possible after receiving orders.

Electric stoves should be shipped complete with heavy duty cord, plug and fuse box. An automatic washer can be used if you have one, otherwise purchase a wringer-washer. Electric appliances which are not in good repair should either be put in perfect condition or left behind. Repairs are expensive; spare parts are scarce and good labor is costly. A dryer is useful during the wet season, especially for families with small children and babies. A freezer is convenient either on station or off in a size to fit family needs. Houses in this area have plumbing, but not hot water heaters. Bring a hot water heater if you want hot showers, but bear in mind this will increase the electric bill.

Air conditioners are not furnished in government quarters and are extremely rare in private housing. They are desirable and should be either brought or purchased in the Navy Exchange. For cooling just the bedroom area, a one-ton unit is sufficient. Installation costs vary and utility charges are very high in civilian housing. The unit should have a washable filter plus an extra replacement and time delay fuse.

Manila TV stations have good reception but in most instances require an outside antenna. It is suggested you bring one from the States.

Rental beds are hard and sometimes not very comfortable. Beds furnished by Navy housing are satisfactory, but beds may be shipped from the States if desired.

All electrical appliances that are handy at home will be equally useful here. However, it is suggested that you check your appliances for time delay fuses and obtain them before shipping them. Vacuum cleaners, ironers, sewing machines and fans are useful. Two or three floor fans are needed year-round (in non-airconditioned spaces). Wool rugs and carpets should be left in storage, but cotton rugs and scatter rugs are useful. Lamp shades are difficult to purchase in the size and color desired.

Electric service is reasonably good in the Sangley (Cavite) area with 110-220 volts available. However, on-station, 220 seldom reaches 190 volts, causing some motor difficulties.

All-Navy Cartaan Contest
William R. Maul, CTCA, USN.



"Ha-ha-ha . . . bravo, brava! Can you do any athers? . . . say, Jimmy Stewart? James Cagney? A seaman being caurt-martialed?

Storage space is very limited. No government storage is available, and items which are not required should be left at home. Extra linens and towels are necessary since they are changed more often. Heavy cotton bedspreads or sheet blankets are needed.

NOW HERE'S THIS

Homeward Bound

Sing no sad songs far the battleship *USS Alabama* (BB60), far her fate is not to be the cutting tarch and scrap pile as befell sister ship *USS Indiana* and ather BBs. The state of Alabama is paying *Alabama's* passage home to Mobile, where the veteran will become a state shrine.

The ship's departure from Puget Saund Naval Shipyard, after acceptance by the state's Battleship *Alabama* Cammissian, further reduces the ance-great U. S. battleship fleet ta faur. All are mothballed, and all are 45,000-tan *Iawa*-class ships—*Iawa* (BB61), *New Jersey* (BB62), *Missauri* (BB63) and *Wisconsin* (BB64).

***USS Massachusetts* (BB59), also an *Indiana*-class ship, is stricken from the list, but might also became a state shrine.**



Subic/Cubi Point

Housing—Housing is very good, permanent type, and consists of two- and three-bedroom units. The three-bedroom units are one-story rambler duplexes and two-bedroom units are two-story duplexes. The enlisted quarters have all living spaces on the second floor level with the ground floor consisting of a carport, utility area and patio. None of the available quarters have garages.

Entry clearance and concurrent travel must be requested from ComNavPhil. There is an average waiting period of four to six months for Navy housing based upon a priority system. When government quarters are occupied, the full quarters allowance is withheld.

Furniture and Appliances—Generally, personnel occupy government quarters, and it is not necessary to bring furniture. Most of that provided is of rattan type which is suitable for Philippine weather. There is no need to bring an automatic washer as all public quarters have them. A second freezer to supplement the one provided in public quarters is convenient. Air conditioners are desirable and should be wired for 110-220 volts as conditioners using 220 volts require rewiring of quarters at personal expense. At the present time, TV reception is fairly good but requires an outside antenna which should be brought from the States.

San Miguel

Housing—Generally, quarters are not available upon arrival, and there is no suitable off-base housing available. Accordingly, personnel assigned to San Miguel are not normally permitted to bring their dependents until public quarters are acquired. However, personnel in receipt of orders to San Miguel should still request concurrent travel from ComNavPhil since quarters may be available on occasion. Personnel reporting to San Miguel may apply for housing and be placed on the waiting list on the date of arrival.

Furniture and Appliances—Private housing is not available and all personnel live in government quarters with adequate furniture. Personnel shipping their own furniture, furnishings (lamps, etc.) and appliances (stoves, freezers, refrigerators, washing machines) will be required to use them in lieu of government-owned furniture. Television is available but reception is poor, so bring an outdoor antenna along with it.

Conversion and Advancement in Missile Technician Ratings

IN TODAY'S Navy, men with responsibilities in the area of shipboard missile fire control have found themselves with increasingly important jobs. At the same time, it is planned to reduce frequency of shipboard testing of surface missiles.

As a result, it has become necessary to channel the skills of missile technicians (MTs) into areas of broader responsibility—especially as they reach the higher pay grades.

The big change began when the responsibilities of the Gunner's Mate Missile (GMM) rate were broadened to take over some of the functions which are within the scope of the MT rate.

Missile technicians were then given the opportunity to widen their career opportunities by voluntarily changing their rating to Missile Fire Control Technician (FTM).

The final step in the conversion will take place with the automatic change in rating of all missile technicians trained in the Surface Missile Systems Program to the Fire Control Technician (FT and FTM) rates.

Here is the way it will work:

- Beginning 1 September, all missile technicians with primary NEC's of MT-1313, MT-1314 or MT-1316 will be converted to Missile Fire Control Technicians (FTMs) if they are in pay grades E-6 or below. Missile Technicians in pay grades E-7 and above will become Fire Control Technicians (FTs).
- Missile technicians with primmary NEC 0000 in MT-1313, MT-1314 or MT-1316 billets will be converted to FTM or FT.
- Those men who are not in the MT or FT rate but who are attached to surface missile ships and activities could request lateral change of rating to FT or FTM before 1 September provided their NECs are MT-1313 or 1314.

Even though MTs will have become FTs or FTMs, they will retain their MT-1313 and 1314 NECs for the time being. The NECs will later be changed to FT rating series codes and both personnel and billets will automatically be converted to the new FT numbers.

Although not entirely settled yet, it appears that few further qualifications and practical factors will be required of men in the FT rating.

Changes to the MT rating will be more extensive—all qualifications and practical factors related exclusively to surface missile testing will be removed. Not all of these, however, will go to FT rating. Many will be assigned to the GMM rating.

The revision of the MT advancement qualifications will include incorporation of items directly related to the submarine program.

Here is the timetable for phasing in the new FT and MT qualifications. The dates are approximations:

1 Feb 65—Revised FT and MT qualifications for advancement in rating.

1 Feb 65—Revised FT and MT school curricula.

1 Mar 65—FT and MT study guides for advancement in rating.

1 Mar 65—FT and MT practical factors.

1 May 66—Training course manuals and correspondence courses.

The revised FT and MT advancement examinations probably won't be ready before the August 1965 Navy-wide examinations. To prevent men who converted to the FTM or FT rates from being penalized, however, an examination transition period has been provided which will follow this schedule:

February 1965 Navy-wide examinations—Men who convert to FTM or FT in accordance with BuPers Notice 1440 of 28 May 1964 have the option of taking the MT examination or the FTM/FT examination. Those who elect the MT examination and are selected for advancement, will be advanced as FTM or FT.

MTs in the Submarine Force will take the MT examination and, where applicable, advance as MTs.

August 1965 Navy-wide examinations—Men who have converted to FTM or FT and who participate in this examination will take the new FTM and FT examinations based on new quals and study materials.

MTs in the Submarine Force will have to take the new MT series examinations based on new qualifications for advancement requirements.

The August 1964 FTM and FT examinations were based on present qualifications for advancement in rating. The August 1965 examinations, however, will be based on the revised qualifications for advancement of FTM and FT personnel.

Men in the MT rating (PNEC-1313 or 1314) who are attending Class "B" School when the switch is made, will be converted to FTM or FT rates and complete their course. Those who are scheduled for MT Class "B" School, however, will be converted to FTM or FT and ordered to FT Class "B" School.

Complete information on the Surface Missile Systems Missile Technician (MT) Conversion Program can be found in BuPers Notice 1440 dated 28 May 1964.

All-Navy Cartoon Contest
Paul B. Kincade, LT, USN.



"For the last time, Myrtle, it's not necessary to get into the pay line to collect your allotment,"

Top Honors for Navy Nurse

An ex-enlisted woman has won top honors in the Navy Nurse Class at the Newport, R. I., Women Officers School. The honor student is Lt(jg) Marcie M. Richmond, who graduated first in class WN64-9.

In addition to four years of college, she served a tour as a Navy hospital corpsman plus three years as a WAC physical therapist technician in Army hospitals.

While in the Army, she advanced to corporal. In the Navy, during her four-year enlistment, she reached second class hospital corpsman. After her discharge in 1957, she attended the University of Illinois.

About one year after her graduation she applied for the Navy's Nurse Corps, was accepted, and is now serving in her first billet.

Here's a Roundup on Absentee Voting for Naval Personnel

WHETHER at sea or stationed overseas, Navymen will be able to exercise their voting privileges in this year's presidential election. For some it will be for the first time. As with most members of the other branches of the armed forces, a majority of the ballots cast by Navy voters will be of the absentee variety.

The most important piece of advice to any Navyman who wants to vote, says the Navy's Federal Voting Assistance Officer, is to check with the officer in your command who has been appointed "Voting Officer." He has all the information you will probably need.

Here are a few important facts about your eligibility and the laws concerning your voting privileges:

A special application form has been printed and distributed by the U.S. Government for absentee voters. This is the Federal Post Card Application for Absentee Ballot (Standard Form 76, revised 1955), better known as the FPCA.

The FPCA may be used to apply for an absentee ballot and for absentee registration if authorized by your state or territory. All states accept the form under certain circumstances, but standards of acceptance and procedures vary from state to state. It is important to refer to the laws of your state before filling out your FPCA. If your state authorizes your wife to use an FPCA she must, of course, be a qualified voter of the state. It goes without saying that you must both be United States citizens.

In addition to individual requirements specified by the various states, these general rules should be followed:

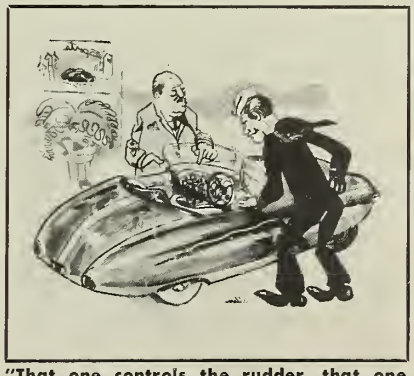
- When filling out the card, print by hand or type. Whichever method is used, be sure to include all information, and be sure it is clear and legible.
- Your name must appear twice —once printed or typed and once in your handwriting. Anyone may fill out the card, but only the person for whom the ballot is requested may sign it, unless otherwise specified.
- In addition to the street and number or rural route of your home, give the name of your county. This helps state officials speed action on the application.
- Military addresses, particularly in abbreviated form, are often confusing. Your present address should be so clearly printed or typed that no letter or digit will be misread.
- Your legal voting residence must be a place where you actually lived—not just a residence of record. No more than one such address may be given. If you have had more than one address in a state, give only the last, most current address.
- Whenever possible, certification should be made by your voting officer, commanding officer, or some other commissioned officer or authorized civilian, such as a notary public. Some states will accept certification by a petty officer.
- Before addressing your FPCA, check your state's mailing instruction. In some cases, the card is to be addressed to the Secretary of State (who then sends it on to the proper local official); in other cases it is to be addressed to a local official, such as a county clerk or auditor, or to an election board.

Mail the FPCA as early as your state permits. No postage is required.

If application for ballot or registration is made by letter instead of FPCA, substantially the same information should be given. It is suggested that this form of application be subscribed and sworn to before a commissioned officer or authorized civilian. Otherwise, it may be returned.

Before you can register and vote, you must meet the eligibility requirements of your home state. Check the list below and then check with your command voting officer for details.

All-Navy Cartoon Contest
Leslie R. Silva, PN3, USN



"That one controls the rudder, that one cuts on the afterburner, and that one jams radar."

Age—all states except Alaska, Georgia, Hawaii and Kentucky require a person to be 21 years of age in order to vote in a general election. In both Georgia and Kentucky, however, 18-year-olds may vote. Nineteen is minimum age for Alaska and 20 years for Hawaii.

Residency—Every state and territory require a minimum period of residency as a prerequisite to voting. These requirements vary from state to state. In some states, six months' residency is all that is needed. In others, one must be a state resident for one or two years. South Dakota, for example, requires its voters to be a resident of the United States for five years, a state resident for one year, a county resident for 90 days and a resident of the precinct for 30 days.

Usually, the state, city or county (or township or parish) in which you lived before entering the Navy is considered to be your legal residence while in the Navy.

Most states provide that time spent in the Navy may be included in the total residence requirement. For example, if the minimum residency requirement is two years and a person lived in that state one year and then in the Navy for one year, he will have fulfilled the minimum residence requirement of two years.

A few states, however, require that a person meet the residency requirement before entering the armed forces in order to qualify for voting by absentee ballot. If you have any doubt about the requirements of your state, you should contact your voting officer. And even if you think that you have all the facts down pat, consult your voting officer anyway; he might have a few tips for you that have been missed.

Registration and Application—Most states require a person to be registered before voting and most permit absentee registration. A few states require registration in person.

In some states where registration is required, it is accomplished automatically when the absentee ballot and the attached registration affidavit have been properly executed and returned to the right official.

A few states require re-registra-

tion periodically.

All states will accept the Federal Post Card Application for ballot from persons desiring to vote. These post card applications are available to all personnel on active duty and their dependents. You may obtain them from your voting officer.

Be sure to make all necessary applications as early as your state will permit as the time element is most important. Check with your local voting officer for details concerning policies and procedures.

If you are a qualified voter, it is your privilege and duty as a citizen to cast your vote in every election.

Check with your local voting officer as soon as possible. He will also have information concerning the absentee voting privileges that your wife is entitled to.

Note: The following state-by-state rules apply to service personnel. The regulations may be different for non-military personnel and for wives and families of servicemen.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
ALABAMA 21	One year in state, 6 manths in caunty and 3 manths in vating precinct. Be registered, pay $1.50 pall tax unless yau are aver 45, ar served in Warld Wor 1, Warld War II, ar (if yau entered service before Jonuary 1955), in Kareon conflict. No poll tax required to vate in federal elections.	Permanent, ance yau have registered. If nat previausly registered, register in persan at the affice af Baard af Registrars in the caunty af residence an the 1st and 3rd Monday af each manth.	Mail FPCA in time ta reach Caunty Registrar in Equity between 45 and 5 days befare election.	Day af election is last day ballat will be accepted.
ALASKA 19	One year in state, 30 days in electian district. Must be able to read ar speak English.	Not required in advance. Is a part of the vating pracedure.	Apply in person ar by mail ta District Magistrate ar Deputy Magistrate, district af residence, ar to Secretary of State, Bax 971, Juneau. Applicatian must be postmarked between 90 and 4 days befare electian. Armed farces may use FPCA.	Must be pastmarked na later than electian day.
ARIZONA 21	One year in state, 30 days in county and precinct. Must be able ta read U.S. Constitutian in English and write name. Must be registered.	Permanent if yau vated in last primary ar general electian. Armed farces personnel apply by FPCA far registratian and absentee ballat.	Armed farces personnel mail FPCA ta County Recorder within 30 days befare Saturday preceding electian.	Will be accepted up ta 1800 an election day.
ARKANSAS 21	One year in state. 6 manths in county, 30 days in vating precinct. Payment af poll tax nat required af armed farces personnel. No poll tax required ta vate in federal elections.	Nat required.	Mail FPCA to caunty clerk within 60 days befare electian.	Will be accepted if it arrives before 1830 on election day.
CALIFORNIA 21	One year in state, 90 days in county, 54 days in voting precinct. Must be registered.	Permanent if yau voted in last general electian. Armed farces personnel apply by FPCA far registratian and absentee ballat.	Apply by FPCA at any time ta caunty clerk, caunty af residence.	Will be accepted if it arrives befare 1700 an day befare electian.
COLORADO 21	One year in state, 90 days in county, 15 days in voting precinct. Must be registered.	Permanent if yau vated in last general electian. Armed farces personnel apply by FPCA for registratian and absentee ballat.	Mail FPCA ta caunty clerk (Electian Cammissian, Denver) between 90 days and clase af business an Friday befare general electian.	Must arrive befare 1700 an day af electian.
CONNECTICUT 21	One year in state, 6 manths in tawn. Must be able to read Canstitutian ar Cannecticut statutes in English, take aath af admission as vater and be registered.	Permanent. If nat registered, mail FPCA ta tawn clerk at any time for Application far Absentee Admissian as an electar.	Mail FPCA ta clerk af municipality (tawn, city, or baraugh) within 45 days before election.	Must arrive before 1800 an the day befare election.
DELAWARE 21	One year in state, 3 manths in caunty, 30 days in electian precinct. Must be able ta read Stote Canstitutian in English and write name. Must be registered.	Permanent if yau voted regularly and did nat mave or change yaur name. Armed farces personnel, mail FPCA when applying far absentee ballat; ar write far Absentee Registratian Affidavit ta Department af Electians, caunty of residence, befare 30 days preceding general electian. Return in time ta be received at least 10 days befare electian.	Moil FPCA to Department af Electians, caunty af residence, any time befare general electian.	Must arrive before 1200 on electian day.
DISTRICT OF COLUMBIA 21	One year in District af Calumbia. May nat claim anather voting residence; if convicted of o felony, must have been pardoned; must be mentally campetent; must be registered.	Must register every 4 years beginning Jan. 1964. Armed farces personnel apply by FPCA far registratian and ballats far general election, any time after 6 May. Return farm in time ta reach D.C. Baard of Electians 45 days before election.	Apply by FPCA ta D.C. Baard af Electians, District Building, Washington.	Must arrive befare 2000 on day af electian.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
FLORIDA 21	One year in state, six months in county. Must be registered.	Permonent in mast counties if you voted once every two yeors and maintained residence in the county. Armed forces personnel moy opply with FPCA when applying for absentee ballats up to 30 days before election. If registrotion has lapsed, armed forces personnel moy re-register when applying for absentee ballot.	Moil FPCA to Supervisor af Registration, county of residence, between 45 and 5 days before election.	Must orrive before 1700 on day before election.
GEORGIA 18	One year in stote, 6 months in county. Must be oble to reod and write from U.S. or Georgia Canstitution in English and be af gaad character and a good citizen. Must be registered.	Permanent if you voted once or requested cantinuation of your registration in lost 3 years. Armed forces personnel must request Military Registration Cord from Tox Collectar, Tax Commissioner, or Registrar, county of residence, at any time. Complete registration before applying for obsentee bollot.	Moil FPCA at ony time to Ordinary, county of residence.	Must orrive before polls close on election doy for armed forces persannel.
HAWAII 20	One year in state, 3 manths in representotive district. Must be able to speok, read ond write English or Howaiian ond be registered.	Permanent if you vated in lost general election. Request affidavit on Applicotion for Registrotion from Caunty Clerk (City Clerk, Honolulu) at least 90 days before election. Return in time ta reach clerk no later than 3rd Wednesdoy before general election.	Write far ballot or apply in person to Caunty Clerk (City Clerk, Honalulu) between 60 and 10 days before election. Armed farces persannel moy use FPCA.	Must arrive by day before election.
IDAHO 21	Six months in state, 30 doys in county. For county elections, 6 months in county, 90 doys in precinct. Must be oble ta read and write, be registered.	Permonent if you voted in last general electian and did not change residence to anather precinct. Armed farces personnel, register when voting obsentee bollot.	Mail FPCA to County Auditor at any time up to 5 doys before general electian.	Must arrive before palls close on election doy.
ILLINOIS 21	One yeor in state, 90 days in county, 30 doys in election district. Must be registered.	Permanent if you voted once in last 4 years except in Cook County ond certain municipolities where registrotion is required. Armed forces personnel need not register ta vote except in municipalities where re-registration is required; moy register or re-register by mail.	Mail FPCA in time to reach Clerk af Circuit Court, county of residence, os early as 60 days before general electian.	Must arrive by election doy.
INDIANA 21	Six months in state; 60 doys in township; 30 doys in ward or voting precinct. Must be registered.	Permonent if you voted in last generol election and maintained residence in some precinct. Mail FPCA far registration and absentee ballat in time to arrive at least 29 doys before election.	Moil FPCA in time to reach Clerk of Circuit Caurt, county af residence, as early as 60 doys before general election.	Must arrive by day before election.
IOWA 21	Six months in stote, 60 doys in county; for municipal and special elections, 10 doys in precinct or word. Registration is required in some places, but not in advance far absentee voting.	Execute offidavit on bock of absentee bollot envelope.	Moil FPCA to County Auditar ar City ar Town Clerk during 90 doys before election.	Must arrive day before electian to count.
KANSAS 21	Six months in stote; 30 days in vating ward ar tawnship. Registratian required in same coses.	Permonent if you voted in lost generol electian and did nat mave ar change name. Not required of armed forces persannel and dependents.	Mail FPCA ta Secretary of State, Tapeka.	Before palls clase an election doy.
KENTUCKY 18	One year in state, 6 months in caunty, 60 days in precinct. Must be registered.	Permanent if you voted in a primary ar general electian in last 2 years. Armed farces persannel are registered autamatically when absentee ballot opplicotion is accepted. Apply no later than 20 days before election.	Mail FPCA postmarked na later than 20 days before electian ta Caunty Clerk.	Must arrive before palls close an electian day.
LOUISIANA 21	One year in state, 6 manths in parish, 3 manths in precinct (faur for municipal electians). Must be registered.	Permanent in some parishes if yau vated ance in last twa years and did nat change voting address ar change name. Required every four yeors elsewhere. Register in persan any time except during 30 days before electian.	Mail FPCA ar ather signed request to Clerk of District Caurt, porish of residence (Civil Sheriff, Orleans Parish) between 60 and 7 days before election.	Must reach issuing official in time for delivery ta Commissioner of Electians an electian day.
MAINE 21	Six months in state, 3 manths in municipality. Must be able to read fram State Canstitutian ond write name in English; be registered.	Permanent unless yau changed your name or place af residence. Armed farces persannel apply by FPCA for registrotian and absentee ballot.	Mail FPCA ta Secretary of State, Augusta, ar ta clerk af city ar tawn af residence ot ony time.	Must orrive before 1700 on election day.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
MARYLAND 21	One yeor in state, 6 months in county or city before date of generol election. Must be registered.	Permonent if you voted in lost 5 years. Armed forces personnel ond recently discharged ormed forces personnel may register when voting by absentee ballot.	Moil FPCA or other applicotion in time to reoch Secretory of Stote, Annapolis, ond then be forwarded to local Board of Supervisors of Elections by no loter thon 10 days before election.	Must orrive before polls close on election doy.
MASSACHUSETTS 21	One yeor in state, 6 months in city or town. Must be able to read State Constitution in English ond write your name; be registered.	Permanent. Armed forces personnel registered when ballot applicotion is accepted. Apply to City or Town Clerk before 31st doy preceding generol election.	Mail FPCA to City or Town Clerk ot ony time. If you are not registered, opply in time to meet above registration requirements.	Must orrive before polls close on election doy.
MICHIGAN 21	Six months in stote, 30 days in city or township. Must be registered.	Permonent unless you failed to vote regularly, did not apply for continuotion of registrotion os required (every 2 years), moved from city or township, or foiled to record chonge of oddress. Application for Continuotion of Registrotion is sent with suspension notice ond must be returned to City, Township or Village Clerk within 30 doys or registration will be conceled. Armed forces personnel opply by FPCA for duplicate registration forms ot any time or when opplying for ballot. Completed registration forms and voted ballot must be returned in seporate envelopes before polls close on election doy.	Mail FPCA in time to reoch City, Township or Villoge Clerk as eorly os 75 doys before ond no loter thon 1400 on Soturdoy preceding election.	Must orrive before polls close on election day.
MINNESOTA 21	Six months in state, 30 days in precinct. Registrotion is required in some ploces.	Permanent if you voted once in last four yeors. Armed forces personnel opply by FPCA for permonent registration ond obsentee bollot.	Moil FPCA to County Auditor at any time.	Must orrive before polls close on election doy.
MISSISSIPPI 21	Two years in stote and one yeor in election district before date of generol election. Must be oble to read ond write Stote Constitution, be registered, poy $2 poll tax by 1 Feb. except ormed forces personnel outside U.S. No poll tax required to vote in federal elections.	Permanent unless re-registration is ordered by County Board of Supervisors. Armed forces personnel, opply by FPCA for registration application ond ballot. Complete registration four months before general election.	Moil FPCA to City or County Registror. Applications ore accepted no earlier than 60 doys before general election.	Must orrive no loter thon election doy.
MISSOURI 21	One year in state, 60 doys in county, city or town.	Permonent if you met voting requirements ond did not change name or place of residence. Armed forces personnel are not required to register.	Moil FPCA at ony time to Clerk of County Court or Boord of Election Commissioners, place of residence, for "Official War Bollot."	Must arrive before 1800 on doy after election doy.
MONTANA 21	One year in state, 30 days in county or precinct. Must be registered.	Permonent if you voted in last biennial general election and did not move from voting precinct. Armed forces personnel, mail FPCA, signed under oath, in time to reach County Clerk no later than 45 days before election.	Mail FPCA in time to reach County, City or Town Clerk within 45 doys before election.	Must arrive before polls close on election doy.
NEBRASKA 21	Six months in stote, 40 doys in county, 10 doys in precinct or ward. Must be registered in cities of over 7000 and in Douglas, Lancoster and Sarpy Counties.	Permanent where required. Armed forces personnel, opply by FPCA for registrotion and absentee ballot. Write in morgin, "Please mail registration forms."	Mail FPCA to County Clerk (Election Commissioner in Douglas ond Loncaster Counties) os early as 90 days before election.	Must arrive no later than 1000 on Thursdoy ofter election doy and be postmorked doy before election.
NEVADA 21	Six months in state, 30 days in county, 10 doys in precinct. Must be registered.	Permonent for armed forces personnel. If not registered, opply by FPCA for registration and absentee ballot.	Moil FPCA in time to reoch County Clerk before 1700 on Tuesday before election.	Must arrive before polls close on election doy.
NEW HAMPSHIRE 21	Six months in voting precinct. Nome must be on Check List, ploce of residence.	Check List corresponds to registration. Armed forces personnel, name is placed on Check List when absentee ballot opplication is occepted.	Moil FPCA at any time to Secretory of State, Concord, for Armed Forces Bollot.	Must arrive before polls close on election doy.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
NEW JERSEY 21	Six months in state, 60 days in county.	Permanent if you vated once in four years and did not move from voting precinct. Nat required of armed forces personnel.	Mail FPCA to County Clerk (Clerk of Municipality for municipal elections) at any time. In case of doubt about county or address, send FPCA to Secretary of State, State House, Trenton.	Must arrive before polls close election day.
NEW MEXICO 21	One year in state, 90 days in county, 30 days in precinct. Must be registered.	Permanent if you voted in last two general elections and did not change residence. For armed forced personnel registration in advance is not required.	Mail FPCA to Secretary of State, Santa Fe, any time after 1 July for general elections.	Must reach Secretary of State in time to be forwarded to County Clerk by noon of day before election.
NEW YORK 21	One year in state, 4 months in county, city or village, and 30 days in election precinct. Must be a citizen at least 90 days before election. Must be registered. Proof of literacy is required, except for armed forces personnel when voting by absentee ballot.	Permanent in some places. Armed forces personnel apply by FPCA for registration and absentee ballot.	Mail FPCA to Division for Servicemen's Voting Office of Secretary of State, Albany, at least 10 days before election.	Must arrive by noon, day before election.
NORTH CAROLINA 21	One year in state, 30 days in voting precinct. Must be able to read and write from State Constitution and be registered.	Permanent except for armed forces personnel an leaving service. Apply by FPCA far registratian and absentee ballot.	Mail FPCA to Secretary of State, Raleigh, or to Chairman, County Board of Elections, at any time.	Must arrive before noon on Saturday preceding election.
NORTH DAKOTA 21	One year in state, 90 days in county, 30 days in voting precinct.	Nat required of armed forces personnel.	Mail FPCA to Caunty Auditor within 30 days before election.	Will be accepted up to one week after election day.
OHIO 21	One year in state, 40 days in county, 40 days in precinct. Registration is required in some places, except for armed forces personnel outside the state.	Permanent if you voted once in last two years and did not move or change name after registering. Armed forces personnel outside the state, not required for voting by absentee ballot.	Mail FPCA in time to reach Clerk, County Board of Elections, after 1 Jan. and not later than noon of third day before election.	Must arrive before noon on election day.
OKLAHOMA 21	One year in state, 6 months in caunty, 30 days in election precinct. Must be registered except for armed forces personnel outside U.S.	Not required for voting by absentee ballot.	Mail FPCA any time to Secretary, County Election Board.	Must arrive before 1700 on Friday preceding a Tuesday election.
OREGON 21	More than 6 manths in state. Must be able to read and write English. Must be registered.	Permanent unless you failed to vote in last general election, ar a change of address caused your primary voter's pamphlet to be returned to sender. Armed farces personnel, apply by FPCA for registration and absentee ballot.	Mail FPCA to County Clerk or Secretary of State, Salem, within calendar year of election.	Must arrive before polls close on election day.
PENNSYLVANIA 21	One year in state (six months if previously a resident and returned), two months in election district, precinct or division. Must be registered, except for armed forces personnel.	Not required of armed forces personnel.	Mail FPCA or written request to County Board of Elections at any time.	Must be postmarked no later than election day and must reach County Board of Elections by 1000 on second Friday following election day.
RHODE ISLAND 21	One year in state, 6 months in town or city. Must be registered, except armed forces personnel out of state.	Not required of armed forces personnel when out of state.	Mail FPCA for War Ballot to local Board of Canvassers and Registration in time to be received before 1700 on 21st day before election.	Must arrive before 2100 on election day.
SOUTH CAROLINA 21	One year in state, 6 months in county, 3 months in polling precinct. Must be able to read and write from State Constitution or own $300 in property with current taxes paid. Must be registered.	Request Registration Card from Board of Registration, county of residence, any time during year in which you wish to vote. Return no later than 30 days before election.	Mail FPCA at any time to Board of Registration, county of residence, or to Secretary of State, Columbia, for general or special elections.	Must arrive before polls close on election day.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
SOUTH DAKOTA 21	Five years in U.S., 1 year in state, 90 days in county, 30 days in election precinct. Must be registered.	Permanent if you registered for last primary election and did not change voting residence or political affiliation. Armed forces personnel, mail FPCA for registration and absentee ballot in time to reach Registration Board, place of residence, no later than 20 days before election.	Mail FPCA to County Auditor at any time.	Must arrive before polls close on election day.
TENNESSEE 21	One year in state, 3 months in county. Must be registered.	Permanent unless you failed to vote in four successive years, changed name or voting residence, lost right to vote by court judgment, or disposed of property for property qualifications for voting in municipal elections. Apply in person at County Election Commission Office or by mail when absent from place of legal residence at time of registration. Mail request to County Election Commission. Return notarized forms in time to be received at least 30 days before election.	In person: Apply for and vote ballot in County Election Commission office between 20 and 5 days before election. By mail: Send written request for Absentee Voting by Mail Application to County Election Commission between 40 and 5 days before election.	Must reach County Election Commission by 1000 on election day.
TEXAS 21	One year in state, 6 manths in county. Must pay state poll tax and, if required, county fee of $.25 ar have an exemption certificate. City poll taxes, when levied, must be paid to vote in city elections. State poll tax of $1.50 is reduced to $1 under certain conditions. No poll tax required to vote in federal elections.	There is no registratian law, but possession of a poll tax receipt or exemption certificate corresponds to registration.	Mail FPCA to County Clerk, together with pall tax receipt, exemption certificate, or affidavit that the receipt or certificate has been lost or mislaid or used for onother election and not returned to you.	Must reach County Clerk's office by 1300 on election day.
UTAH 21	One year in state, 4 months in county, 60 days in precinct. Must be registered.	Permanent if you voted in last generol election and did not change your residence. Armed forces personnel apply by FPCA for registration and absentee ballot.	Mail FPCA to County Clerk (City Recorder for municipal elections) within 30 days before election.	Must arrive before polls close on election day.
VERMONT 21	One year in state before general election, 90 days in town to vote far members af General Assembly and Justices. Must take Freeman's Oath and have name on town Check List of voters; pay poll tax to vote in annual town meeting.	Check List of voters corresponds to registration. To get on list, take Freeman's Oath in person or by mail. Apply by FPCA when applying for ballot.	Mail FPCA to Town Clerk at any time.	Must arrive in time to be delivered ta election officials before polls close on election day.
VIRGINIA 21	One year in state, 6 months in county, 30 days in precinct. Must be registered and pay $1.50 poll tax, except armed forces personnel. No poll tax required to vote in federol elections.	Not required of armed forces personnel.	Mail FPCA to Secretary of State ar State Board of Elections, Richmand, at any time.	Must orrive in time for delivery to election officials before polls close on election day. Ballot must be returned by registered or certified mail.
WASHINGTON 21	One year in state, 90 days in county, 30 days in city or voting precinct. Must be able to reod and speak English, and must be registered.	Permanent if you voted once in last 4 years and did not move from city or county where registered. Armed forces personnel, apply by FPCA for temporary registration and absentee bollot.	Mail FPCA to Secretary of State, Olympia, any time before election (preferably after 1 July).	Ballot must be voted on or before election day and reach election officials no later than 15 days after general election. For armed forces personnel, date on offidavit on return envelope serves as voting date.
WEST VIRGINIA 21	One year in state, 60 doys in county or municipality. Must be registered.	Permanent unless you failed to vote once in period of last 2 primary and general elections, or changed place of residence. Mail request for Application for Absentee Registrotion to Clerk of Circuit Court, county of residence, at any time. Return up to 30 days before election.	Apply by FPCA to Clerk of Circuit Court, county of residence, within 60 days before election. Must reach Clerk's office by the Saturday before generol election.	Must reach Clerk of Circuit Court in time to be delivered to election officials before polls close on election doy.

Minimum Voting Age by States	Residence Requirements	Registration	Application for Ballot	Ballot Deadline
WISCONSIN 21	One yeor in state, 10 doys in election district or precinct. Must be registered in some municipalities, except ormed forces personnel.	Not required of ormed forces personnel.	Moil FPCA ot ony time to County, City, Town or Villoge Clerk (Boord of Election Commissioners, Milwaukee).	Must be returned in time to be delivered to election officiols before polls close on election doy.
WYOMING 21	One yeor in stote, 60 days in county, 10 doys in voting precinct. Must be oble to reod Stote Constitution and be registered.	Permonent if you voted once in last two yeors. Armed forces personnel, opply by FPCA for registrotion ond obsentee bollot.	Mail FPCA to County, City or Town Clerk, any time in year of election up to 15 doys before election.	Must be returned to be delivered to election officials when polls open on election day.

List of Motion Pictures Now Available to Ships And Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Robin and the 7 Hoods (2666) (C) (WS); Comedy; Frank Sinatra, Dean Martin.

Honeymoon Hotel (2667) (C) (WS); Comedy; Robert Goulet, Nancy Kwan.

The Raiders (2668); Western; Robert Culp, Brian Keith.

The Misadventures of Merlin Jones (2669); Tommy Kirk, Annette.

Battle Cry (2670); Van Heflin, Aldo Ray (Re-Issue).

Blue Skies (2671); Billy De Wolfe, Olga San Juan (Re-Issue).

Night Has a Thousand Eyes (2672); Edward G. Robinson, Gail Russell (Re-Issue).

Sorrowful Jones (2673); Bob Hope, Lucille Ball (Re-Issue).

What a Way to Go (2674) (C) (WS); Comedy; Shirley MacLaine, Paul Newman.

The Son of Captain Blood (2675); (C) (WS); Melodrama; Sean Flynn, Alessandra Pararo.

The Swingin' Maiden (2676); Comedy; Michael Craig, Jeff Donnell.

Good Neighbor Sam (2677); Comedy; Jack Lemmon, Romy Schneider.

Sea Chase (2678); John Wayne, Lana Turner (Re-Issue).

Easy Living (2679); Jean Arthur, Edward Arnold (Re-Issue).

The Lion and the Horse (2680); Steve Cochran (Re-Issue).

Road to Utopia (2681); Bing Crosby, Bob Hope (Re-Issue).

The Devil Ship Pirates (2682) (C) (WS); Melodrama; Christopher Lee, Andrew Keir.

The Avenger (2683) (C) (WS); Melodrama; Steve Reeves, Carla Marlier.

Walk a Tight Rope (2684); Melodrama; Dan Duryea, Patricia Owens.

The Big Parade of Comedy (2685); Documentary.

Union Paeifie (2686); Joel McCrea, Barbara Stanwyck (Re-Issue).

The Emperor Waltz (2687); Bing Crosby, Joan Fontaine (Re-Issue).

The Scarlet Empress (2688); Marlene Dietrich, John Lodge (Re-Issue).

Let's Faee It (2689); Bob Hope, Betty Hutton (Re-Issue).

Ensign Pulver (2690) (C) (WS); Comedy; Robert Walker, Burl Ives.

The Quiek Gun (2691) (C) (WS); Western, Audie Murphy, Merry Anders.

Night Must Fall (2692); Drama; Albert Finney, Mona Washbourne.

The Chalk Garden (2693); Drama; Deborah Kerr, Hayley Mills.

Strange Lady in Town (2694); Greer Garson (Re-Issue).

Wake Island (2695); Brian Donlevy, MaoDonald Carey (Re-Issue.)

Lightning Strikes Twice (2696); Richard Todd (Re-Issue).

If I Were King (2697); Ronald Coleman, Frances Dee (Re-Issue).

ANSWERS TO QUIZ AWEIGH

Quiz Aweigh moy be found on page 41.

1. (b) Command ship. The silhouette is of USS Wright (CC 2), which is a converted auxiliary aircraft transport (AVT). CC 1 is USS Northampton, a converted cruiser.

2. (c) Guided missile cruiser. The Navy has three ships of this type. They carry two twin Talos launchers (one forward, one aft) and two twin Tartar launchers (one port, one starboard). Guided missile heavy cruisers, unlike CGs, retain their eight-inch turrets forward.

3. (a) Amphibious transport dock. USS Raleigh (LPD 1) was commissioned in September 1962, Vancouver (LPD 2) in May 1963, and La Salle (LPD 3) in February 1964. The next three—Austin (LPD 4), Ogden (LPD 5) and Duluth (LPD 7) are slated for commissioning in 1964 and '65.

4. (b) Cable repair ship, *USS Neptune* (ARC 2).

No Need to Keep Security Number A Secret from DO

Does your disbursing officer have your correct Social Security number? If he doesn't, your wages are probably not being credited to your Social Security Account.

The U.S. Navy Finance Center, Cleveland, says that approximately 14,000 Navymen are in danger of losing out on their credits or encountering delays when applying for benefits because of errors in their account numbers.

Some of these errors will be picked up in computer processing at the Center. But the greater number must be corrected by checking the man's Social Security Card (Form AO-702.1).

The Navy Finance Center is sending verification cards to disbursing officers on all discrepancies that have not been corrected. But this will take care of only those errors known at this time. To prevent future errors:

- Keep your SSA card handy so it may be referred to when needed. Many errors are caused by Navymen relying on memory when asked to give this information.
- Apply for duplicate cards when your original is lost. Duplicates may be requested from the Social Security Administration, Baltimore, Md.
- File name changes properly. In addition to changing your Navy records, you must advise the Social Security Administration. Name discrepancies do occur, and they're as grievous as number errors.

Now's the Time for Annual NROTC Program Application

If you have a son, relative or friend who is a high school senior or recent graduate, who is interested in a career as a commissioned officer in the U. S. Navy or Marine Corps, and who is not on active duty, he will want to know about the Regular Naval Reserve Officers Training Corps program. Reserve personnel on inactive duty who meet the eligibility requirements are also invited to apply.

The Navy is now making final preparations for the 19th annual competition to select the young men who will be enrolled as midshipmen in the Regular NROTC in 1965.

The qualifying examination—the Navy College Aptitude Test—will be conducted on 12 Dec 1964. Applications must be received by 20 Nov 1964. Examination centers will be established at naval activities overseas as well as throughout the U.S.

Applicants receiving a qualifying score on the test will be scheduled for medical examinations and interviews. About 2000 will be selected by special boards convened in each state and territory to attend college next fall in preparation for Navy careers.

The purpose of the Regular NROTC program is to educate and train well qualified young men to complement the junior officers commissioned from the Naval Academy. Selected applicants receive four years of government subsidized education at one of 52 outstanding colleges and universities throughout the country. In addition to tuition and other educational expenses, the Navy furnishes books, uniforms, and a $50 per month retainer fee.

NROTC midshipmen have a wide choice in their major field of study but must complete 24 semester hours of naval science courses and participate in three summer training cruises. After receiving their baccalaureate degree, Regular NROTC students are commissioned in the Regular Navy or Marine Corps, with the same rank, promotional opportunities and choices of duty assignments as USNA contemporaries.

NROTC bulletins with application blanks enclosed may be obtained from the Chief of Naval Personnel, Navy recruiting stations and local high schools.

FROM THE SIDELINES

ACCORDING to our book of Hoyle, rank hath no privileges on the golf course. Consequently, when CAPT Dan Garrison won his ship's golf tournament, it meant more than being tops in an ordinary competition, since he was up against the avidly sports-minded crew of USS *Canberra* (CAG 2).

For the benefit of any landlubbers in the audience who believe shipboard sailors suffer curtailed sports activities, *Canberra's* stream of extra-curricular events offers proof that this ain't necessarily so.

When an athletically-inclined man comes to *Canberra,* he may choose to participate in any or all of 13 organized sports—in intramural or varsity competition. Besides all the standard competitive sports, these cruisermen noticeably take to hunting and fishing, with gear supplied by Welfare and Rec. Their tennis team is under professional instruction.

We're not sure if the *Canberra* sports rage is responsible for this, or if things like this merely serve to sharpen the enthusiasm, but earlier this year ENS R. G. Demarest went TAD from *Canberra* to help PacCoast win the All-Navy indoor swimming championship.

One thing's certain—you'd better get some practice knocks before you take on a *Canberra* team in any sport.

★ ★ ★

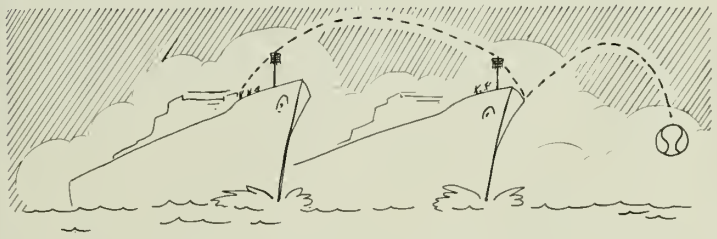
Fifty-seven feet of Navy basketball players recently, completed a successful road tour of Japan, where they beat the Olympic-bound Tokyo *All-Stars* five games to one.

The Navymen were the nine-man SUBPAC *Raiders'* squad, runners-up in this year's All-Navy championships.

Their favorably lopsided record is the *Raiders'* reward for keeping their eyes on the ball when it would have been easy to be distracted.

With the magic of such cities as Yokosuka, Osaka and, of course, Tokyo at their doorstep, the *Raiders* observed rigid curfews and worked out several hours each day, in addition to playing their schedule. They went to Japan to win.

Mixed with this determination was some crowd-pleasing hocus-pocus on the court. In one game, Lee Jackson hit Maltrus Neely with a 30-foot behind-the-back pass – *Globetrotter* style—that brought 2000



spectators to their feet in roaring admiration.

One of the games of this series—sponsored by the Japanese Amateur Basketball Association to provide practice for its Olympic team—was nationally televised.

The *Raiders* gained great popularity in the host country and made some memorable court acquaintances.

★ ★ ★

Three Navymen, so far, have made the U. S. Olympic team. They are ENS Bill Stowe (rowing), LT Al Morales (fencing and saber) and Jim Rosette, AN (boxing). Others are still in contention.

—Bill Howard, JO1, USN



ALL HANDS SPECIAL SUPPLEMENT

CROSSING THE PACIFIC IN A MONITOR

In a period of transition no one is quite sure just what the "new look" will be. Sometimes it is an adaptation of what has already been tried. Sometimes it is a dramatic shift brought about by changing ships or weapons. Each type of ship has its moment of glory—and some last for a considerable period of time.

Down through the years the Navy has seen many interesting ships that were innovators. The monitor, for example. Everyone remembers the famed battle of the two ironclads of the Civil War. Whatever happened to this class of ship?

Many will be surprised to learn that they were still operating and still controversial at the turn of the century—improved variations of the monitors of the 1860s.

Here is a previously unpublished, on-the-scene account of the journey of the monitor Monterey *from the West Coast of the United States to the Philippines in 1898. The story, as told by Ensign Percy L. Neel, Assistant Engineer,* USN, *has been made available to* ALL HANDS *through the courtesy of Lieutenant (jg) M. M. McClure, USN. Ensign Neel was a graduate of the University of Pennsylvania, Class of 1897, with a degree in mechanical engineering. He was commissioned an ensign in May 1898.*

Monterey, *commissioned in 1895 at San Francisco, was a 4084-ton monitor. She was 256 feet long, and had a beam of 59 feet. Her battery of 22 guns ranged from two 12-inchers to four three-pounders.*

As described by Ensign Neel, on 11 Jun 1898 Monterey *sailed from San Diego, for the Asiatic station, accompanied by the collier* Brutus. *The vessels reached Honolulu on 24 June and left there 1 July, arriving at Manila on 3 August. The trip had been an extremely difficult one; the heat on board was terrific; the machinery broke down, and the monitor ran at times partly submerged.*

Here's the story of her crossing of the Pacific, as described by Ensign Neel.

I JOINED MY SHIP, *Monterey*, on Decoration Day, 1898, while she was coaling at Mare Island. When I arrived, her bunkers were full and coal was being placed around her turrets in bags and held in place by a net. A few days later we left Mare Island and proceeded, amidst the blowing of many whistles and sirens, to San Francisco. Here we awaited the collier *Brutus* which was not quite ready. On Saturday *Brutus* appeared and we were all impatient to proceed to Manila, when the distiller was discovered to be making salt water. This necessitated removing the coils and making a new set which delayed our sailing for another three days. We again proceeded down the bay amidst a greater noise and many signals of "good-bye" and "good-luck" and then passed out the Golden Gate.

That night the water became very rough and broke over the decks and superstructure with such force that it washed overboard about 50 tons of coal from around the after turret. This necessitated a new supply, but the captain thought it wise to proceed to San Diego for it.

Our approach had already been heralded and the papers contained accounts of our approach and many conjectures of the cause, since we were supposed to be underway to Manila. Here we also received the San Francisco papers, giving us quite an account of the noisy send-off we had received.

After coaling here, we again headed for Honolulu. The weather was very fine the first two days. Later a heavy swell arose which caused the ship to roll and pitch considerably. It had a very quick roll; about 10 times that of *Olympia*.

One day we had a collision drill. There are a number of drills; each drill has a separate call and men are assigned certain stations, which on the call for a collision, abandon ship, fire, general quarters, etc., the men proceed instantly to those stations. Everyone has some duty. On this day it started to get warm and has been warm ever since. The next few days we did little but run through our various drills. A week after our departure, *Brutus* took us in tow. She let out a line to which some buoys were attached and when the line floated to us we picked it up and attached it to the yoke connection at the bow of *Monterey*.

After five days of towing we cast off the tow line and started at a 10-knot gait for Honolulu, leaving *Brutus* far astern. Sighted land early in the morning of 24 June. Arrived in port at 5 p.m. There were about four troopships there.



THE AUTHOR, Ensign Percy L. Neel, Assistant Engineer, USN, is shown wearing Navy uniforms typical of his day.

WE WERE ALL GLAD to go ashore for, as the officers' apartments are all under water and we had battle plates in the deck lights, all the light was artificial. Our deck generally had a wash on it which made it untenable, and our only place for fresh air was on the superstructure. The men had no other place to go. The berth deck was always crowded with hammocks and the only ventilation for the men and officers was by the blowers.

It was extremely uncomfortable for everyone, and a trip few would care to repeat. The heat increased day by day, and the temperature in my quarters was often 102 degrees. The evening of our arrival I took a stroll around Honolulu and was invited to several clubs there, returning aboard ship the next morning for quarters. Honolulu is an ideal garden spot.

At Waikiki, a few miles from Honolulu, we can take a plunge in the surf or get in a catamaran and ride the swells, which is great sport. They can also be ridden by swimming with a board, at which the natives are very proficient. Our crew owned the city and everything was done for them that could be. At nearly every house an American flag was displayed. The gardens in the poorest houses are such as we could only raise in hothouses and then not so luxurious, for the climate reminds you very much of a hothouse and is nearly constant all year round.

We arrived here on the 24th and were sorry to bid goodbye to everyone on the 29th. We had said goodbye once before and returned—and this was to be no exception, for we had only been out a few miles when steam could be seen escaping from *Brutus* and she flew her distress signals so we were compelled to put back.

Here we stayed two days for *Brutus* had some iron filings under her

safety valve and it would not close. We anchored outside about three miles, and no shore leave was given, expecting to be ordered off each minute. This was very disappointing for we had had quite a good deal of company on the ship when we were not ashore, and the Sunday previous we had thrown the ship open to all visitors, and it was crowded from morning till night. Some young ladies came over one day and gave us quite a musical treat.

THE CAPTAIN then informed us we were going to the island of Guam, one of the Ladrone Islands. He informed us there were four forts there and also that *Charleston* was supposed to have stopped there, as she left Honolulu under sealed orders. We will reduce the forts, if necessary, coal ship and proceed to Manila. The cat is out of the bag—no newspaper reporters can obtain the information now. *Brutus* broke down again and delayed us to midnight. On July 5 we again went in tow of *Brutus*.

Then commenced our tiresome, tedious, monotonous and warm voyage of three weeks to the island of Guam. On July 4 we fired the national salute of 21 guns in honor of the nation's birthday. The wardroom gave a punch to which the captain was invited. The chandelier was draped with flags and ribbons, and on the table below, the large punch-bowl.

Each day was the same from here on. We had general quarters at all hours of the day and night, and we stowed coal below as fast as the bunkers were emptied and began to free the turrets so they could be used, and clear the ship for action. The men had constant practice with the handling of guns and drilling.

THE ONLY THING that troubled us was the intolerable heat. Not having an ice-machine, our water was cooled entirely by earthenware monkeys. At Honolulu I purchased, as did the rest of the officers, a Japanese mat which made sleeping much pleasanter and cooler. On July 9 we passed the 180th meridian of longitude, halfway around the world from London, and passed from the West into the East. We also lost a day here—it was Sunday, and I remarked to one of the crew that they all enjoyed the longest sleep of their lives, for we all retired on Saturday night and woke up Monday morning.

On the 12th we saw another ship; the second one we had seen since starting on our long trip. On the 23rd land was sighted and the ship was stripped for action. The stays were all snaked, that is, they were all bound together by small wires so in case some were shot away they would not fall on the deck or superstructure and interfere with the working of the guns. The boats were wrapped in canvas to prevent splinters flying. The railings were taken down, the surgeons laid out their oilcloths and surgical instruments for the wounded and then general quarters were sounded and everyone took his station, ammunition was hoisted, and the ship was ready for action.

But we had a disappointment in store. The captain's gig was called away, and Mr. Beatty, our navigator, took some buoys along to mark the channel. The whaleboat was also called away, and Mr. Flechtler, our ranking lieutenant watch officer, took several men with rifles and ammunition to reconnoiter and demand the surrender of the place. After an hour

ACROSS THE PACIFIC THE HARD WAY—In terrific heat, the *Monterey* fought 7000 miles of ocean for 58 days.



they returned to the ship and informed us that *Charleston* and the first expedition of transports had taken the garrison and Governor-General as prisoners to Manila.

We were all disappointed after our uneventful voyage of 22 days. Still, we were hoping Manila might not be taken from the Spanish, or that we might meet some of Carnara's fleet.

LATER A SMALL sailboat was put out from the shore and came alongside. One of the men was allowed to come aboard and he informed us that the forts were abandoned and the Spanish flag hauled down. The American flag had been hoisted, saluted, and again hauled down as there was no caretaker.

We calmed our disappointment by the fact that we were again near land. At daybreak I was on the afterbridge from which land could be seen; and later we could smell the tropical fruits, especially limes, which was very gratifying. The harbor on Guam is called San Luis d'Apia. It is landlocked; the ship could not come in very far, and where we were anchored was about 16 feet deep. Our ship draws 14 and one-half feet, and the trip to the village meant a row of six miles.

Soon the natives came out in boats and offered us many curios. They had no idea of money, and one large fellow brought us half a dozen live chickens for which he wanted $5.00. Our Chinese steward was there trying to bargain with him when one enlisted man came along with a bar of salt water soap. Immediately he got the chickens.

Brutus came alongside of us and we are again filling our bunkers. The next morning I had the four to eight watch and at 8 o'clock I went ashore with Naval Cadet Mahony and Lieutenant Buchanan. After a row of six miles the water becomes very shallow and in a short time looked a little over a foot deep, and all along the water was very clear and we could see magnificent specimens of coral in all varieties along the bottom.

Finally we arrived at the village. There were about two dozen natives around, some with very little on, and we inquired for a conveyance to go to the city of Agana, another six miles distant. The best we could do was to obtain two small two-wheeled affairs with these Corean horses attached. The horses are about the size of our ponies. With these we went to Agana.

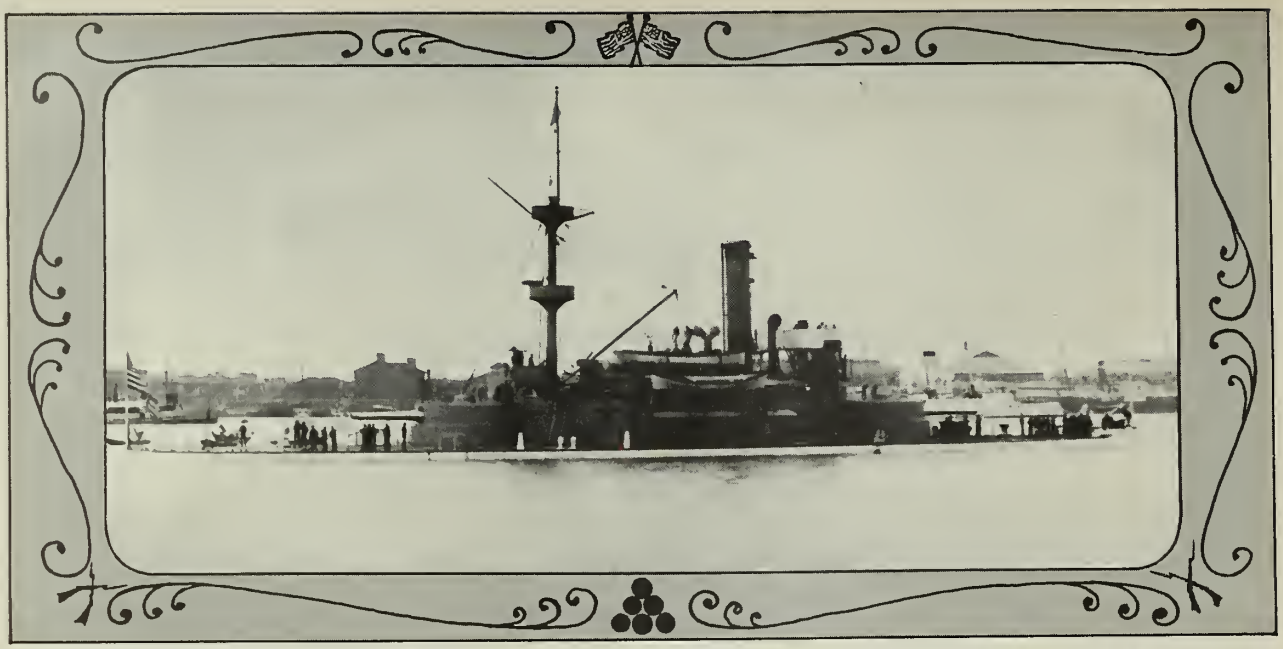
There are only a half-dozen carriages in the whole island, the riding and carrying all being done by immense water buffaloes, fierce-looking animals. Some of them measured five feet across the tips of their horns. We see them in circuses as the sacred bull of India.

THE NATIVES of Guam were very polite to us and all, even the small children took off their hats to us, calling out "Buenos Dias" to which we replied. Getting thirsty along the route, we stopped at a native cottage and asked for some coconuts. Our host climbed a tree and and soon brought us down several; and with one blow of his knife cut a hole. The coconut was full of fluid and was very agreeable to us after our ride. He refused to take any money and it was only after a good deal of coaxing and telling him to accept it as a souvenir of the Americans, that he accepted.

Arriving in the city of Agana, we proceeded to the largest building there and asked to have something to eat; at least order lunch. We

COLLIER BRUTUS, with her share of breakdown problems, accompanied *Monterey* on the lengthy voyage to Manila.





MONITOR MONADNOCK was a runner-up to *Monterey*. Ships were to reinforce Commodore Dewey in the Philippines.

then took a look around and saw the town. There was not much to see. The houses were mostly thatched; there were a few plaster houses, and also a Spanish college for boys and girls, and on the side of the building a stone stating it was started in 1895 and finished in 1898.

We then went to the Government Building and saw the Armory with a few hundred old-fashioned guns left there.

Returning to the place we had ordered lunch, we were met by a man who spoke English and he informed us that the man we were dining with was the wealthiest man in the islands.

WHEN WE HAD FINISHED the meal we offered to pay him for his kindness, but he would not accept any money. So in order to return the favor we invited him to come and see us aboard ship the next day. After leaving him we went to the Padre, a very genial old man, one who had been in the islands over 30 years, and he told us many things about the natives. The Spaniards always compelled the natives to take off their hats and bow to them every time they passed. That accounts for their great politeness to us. We walked back to the village and so saw how they lived. Their principal article of food is rice.

On our way we passed the Spanish Governor's wife and she seemed quite young and very sad because her husband had been taken to Manila.

The next day the merchant came and brought six sons with him and the two sons of the Spanish Governor also came. We were rather crowded. They spoke no English and we very little Spanish. It was a curious meal but I think they will long remember

The Monitor: A Step in History Toward Today's Navy

Although almost forgotten today, monitors formed an invaluable bridge in naval development, spanning as they did the era between the wooden-hulled sailing ships and the armored cruisers and then the battleships.

Basically, a monitor was a shallow draft combat vessel mounting one or two very large guns and primarily designed for bombardment purposes. It had little freeboard and consequently required heavy armor only along its waterline and on its gun turrets. Although a few earlier models had rudimentary sails, their design almost insisted upon engines of one sort or another for propulsion.

As their design also makes obvious, they were intended to be simply a movable gun platform and, instead of seeking primary protection through the use of heavy armor throughout the ship, they avoided the problem by simply providing—in some types—almost no above-water surface to be hit (other than the gun turrets, of course). However, as time went on, their weather deck became more and more cluttered with top hamper, as might be expected.

Monitors in embyro form were to be found in the British fleets in the 17th century in the bomb ketches then in use. Later, these increased in size and were referred to as "bombs."

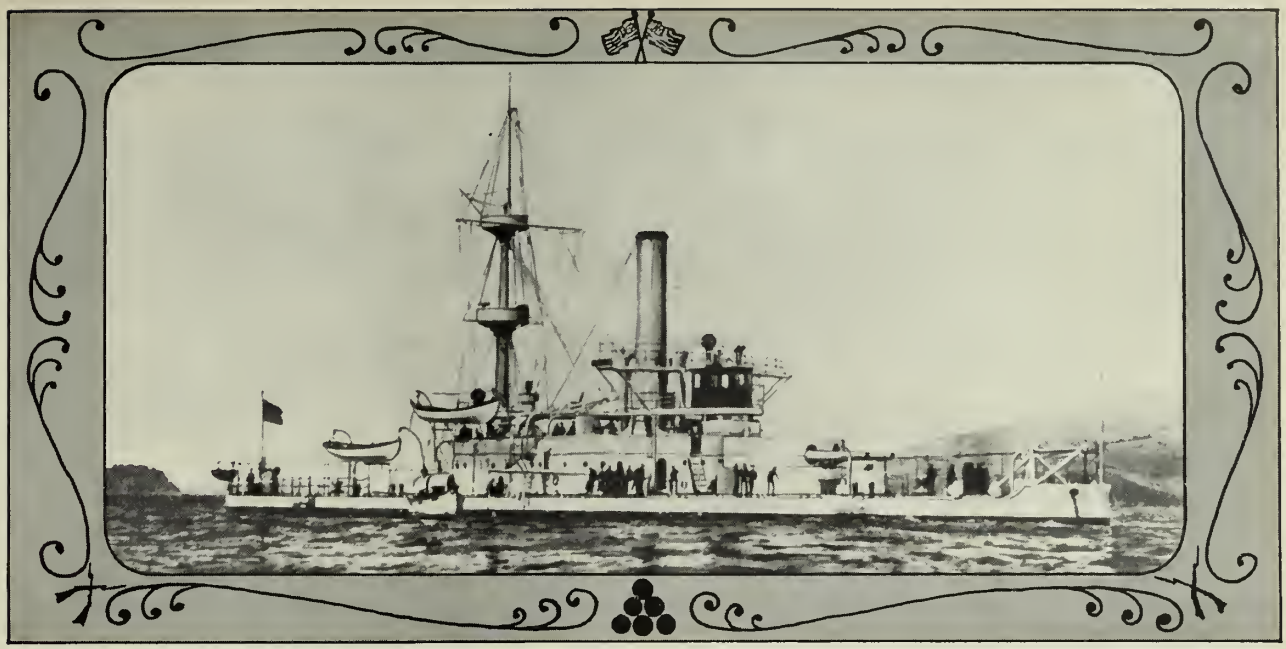
As is well-known today, USS *Monitor* (from whence the name of the type was derived) in her battle with CSS *Merrimack* (or *Virginia*) at Hampton Roads, established that such a vessel was effective for purposes of defense. *Monitor*'s success led the U. S. Navy to construct many small single-turreted monitors and some big, seagoing monitors for coastal service during the Civil War.

Despite the controversy which raged over the usefulness of such a vessel, a summary shows that, although they could not do much damage, neither could they become seriously hurt. Of the 35 monitors operated by the U. S. Navy during the Civil War, none was ever seriously disabled by gunfire, and only one man was killed by gunfire in the monitor fleet during the entire war.

Their greatest usefulness was to be found in their operations in narrow, shallow rivers and in sheltered coastal waters. A few monitors, in addition to *Monterey* saw blue-water service after the Civil War and during the Spanish-American War but, by that time, further developments in naval design had demonstrated the type's ineffectiveness.

In all, some 60-odd monitors were completed by the United States between the Civil War and the time that *Cheyenne*, the last of such types, was decommissioned for the last time in 1926. All but a handful of these ships were commissioned during the Civil War although some were rebuilt during the 1870s and '80s.

However, some European navies employed monitors up to and through World War I; and a few British monitors took part in World War II. By that time, they were merely dangerous anachronisms.



MONTEREY AND MONADNOCK assisted Commodore Dewey's fleet in Manila attack and in Philippines fighting.

it, especially the two sons of the Spanish governor and it must have brought cheer to the heart of the wife when her sons returned and told her how well they were treated.

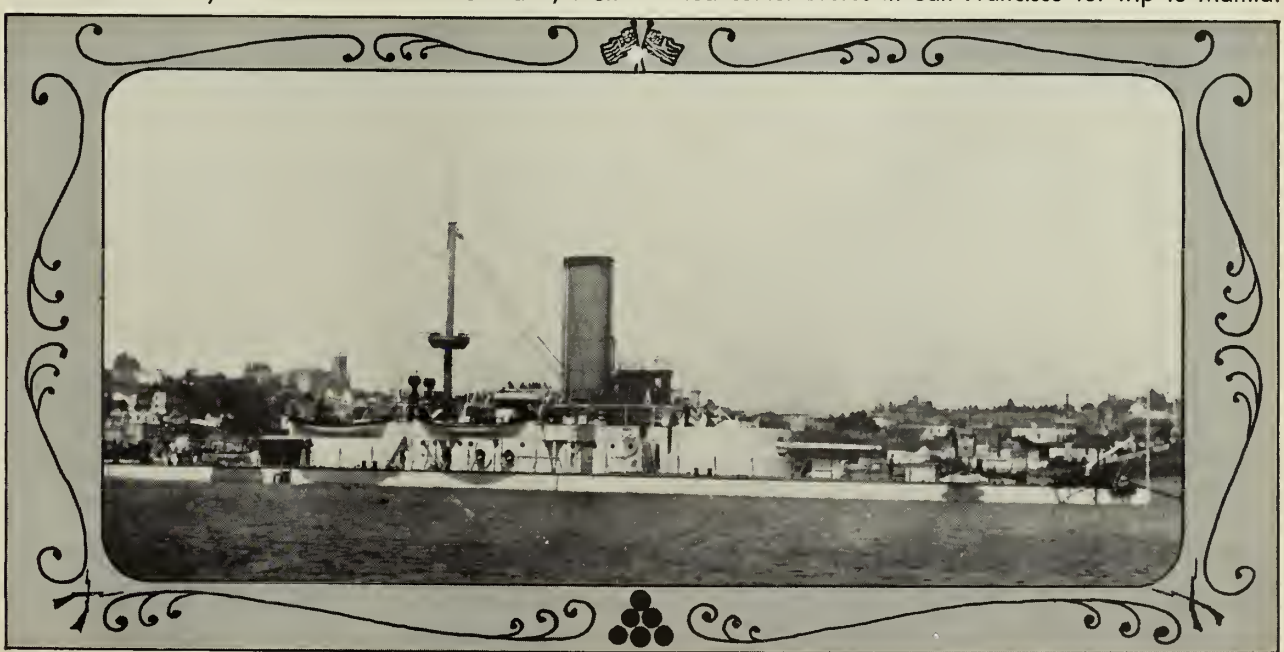
On the 25th we headed for the San Bernardino Straits, 1500 miles away. We were again in tow of *Brutus* so as to have a sufficient supply of coal when near the Philippines.

Our great enemy now was a typhoon and every cloud was watched very closely for no one know how a monitor would stand a storm and especially a typhoon. We did not strike one or it still might be wondered what became of *Monterey*. We stayed in tow of *Brutus* until July 31 when we struck a small storm which was strong enough to make us let go of the tow lines. For a day we were only able to make a few miles; the water broke all over the ship, going completely over the forward bridge, washing the decks, and the remainder of the coal had to be cut loose, and was washed overboard.

Now began a cruise among the islands. There were islands everywhere. They were magnificent with the luxurious green only known to the tropical countries. We passed a lighthouse with a Spanish flag flying. Our colors were displayed but I suppose they did not know what to make of such a curious looking craft for when *Brutus* came along they dipped the colors to her. We did not stop, but continued on.

The next Wednesday, August 3, all the lights were out on *Brutus* and *Monterey*, and we cruised around, about 50 miles from Manila, for we

FUELING—*Monterey* took on coal at Mare Island, then awaited collier *Brutus* in San Francisco for trip to Manila.



had no news from home since the middle of June and had no idea of the condition of affairs. The men had been sleeping at their guns and at three o'clock Thursday morning everyone was awake looking around for other ships. The guns were loaded and we proceeded toward Manila.

ALL NIGHT LONG we had watched the Corregidor Island light. We entered the bay at daybreak. The uniform of the day was white with shoulder straps and we all waited for the call for general quarters. As we came closer we could see the victorious American fleet and the wrecks of the Spanish fleet. Coming still closer we saw *Olympia, Concord, Raleigh, Boston, Petrel* and *Charleston* and the transports.

As we passed ship after ship, the crews were drawn up to attention and they gave us cheer after cheer. The flagship was passed; the admiral's salute fired. The engines stopped, the anchor dropped, and so ended our record trip of 7000 miles across the Pacific in the first monitor to cross. This trip was repeated later by *Monadnock*. We were 58 days out of San Francisco.

We anchored about two miles from Cavite and Manila is across the bay five miles distant. Around us are the half-sunken wrecks of the Spanish fleet. Nearest us is *Castilla*, further away *Reina Christina*, the flagship, and in the distance five more wrecks can be made out. There are now about 5000 of our troops in the trenches in front of Manila. Fighting goes on in the night.

Thursday night, August 4, three men were killed and three wounded. This made up to this day some 40 killed and 90 wounded. The next day we sent all our boats ashore and proceeded to tear down all the woodwork in our ship to prevent the spread of fire, and expected on Monday the 8th to take Manila. We coaled ship Sunday, as did the other ships, which looked very much like action. But on Monday we were informed that the admiral had given the Spanish Governor 48 hours to surrender. The next two days boatloads of refugees could be seen leaving the city.

THE VARIOUS FLEETS which were then stationed in front of Manila were given notice that a bombardment was to take place and they could remain there at their own risk. The German and French men-of-war went out to sea and the English and a Japanese men-of-war came over and anchored near us. Then came a few other hitches, all due to the Army not being ready.

Finally on Saturday morning, the flagship gave the signal and *Monterey* was the first ship to get under way. We were in two columns, *Olympia* heading one and *Monterey* the other. We proceeded that way to Manila; our guns were loaded but we never had a chance to fire a shot. Our orders were: Do not fire until fired upon. We were never fired upon.

The temperature in the engine room was up to 118 degrees. The men could hear the shots of the other ships and were very impatient to hear our guns go. In the fireroom the coal passers and firemen, stripped to their waists, kept the fires burning in the six boilers. We were much closer inshore than the other vessels as we drew less water. And one time, having a chance to go on deck for fresh air, I saw two shots fired from *Olympia's* six-pounders go over our quarter-deck. All the shots struck the old Malate fort and pieces could be seen flying after each shot struck.

After a while the American soldiers could be seen running along the beach. Later a boat was put out and came to the flagship. Then it was announced that Manila had surrendered to the Navy, but not the Army, for they could have held out for years against the Army but not the Navy. That evening about five o'clock as I was standing on the quarter-deck and looking at an enormous red and yellow flag of the Spanish flying over the city and remarked to another officer how large it was, it was hauled down and in its place an even larger American flag was hoisted. Then all the ships of the Navy fired a national salute, till it looked like another engagement. So ended the day of the capture of Manila.

A brief word on the situation to which Ensign Neel refers but does not describe in detail:

The Battle of Manila Bay on 1 May 1898, in which the Spanish fleet was nearly annihilated by then-Commodore Dewey's fleet, did not end the war in the Far East. Spain still held Manila proper and much of the Philippines.

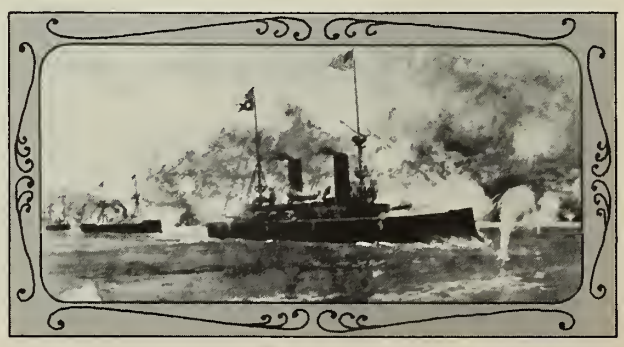
Commodore Dewey was far from home and from any dependable source of supply. His six ships, although they had defeated one Spanish fleet, were merely protected cruisers. It was Dewey's responsibility to discourage a fleet of German warships who appeared to be probing for trouble, hold the Spanish in Manila at bay and, meanwhile, prepare to face another Spanish fleet, composed of armored ships—the closest thing to the battleship of the time—rumored to be departing Spain bound for the Philippines.

To meet this multitude of problems, Dewey needed reinforcements. Accordingly, the monitors Monterey *and* Monadnock *were sent to his aid and two gunboats captured from the Spanish were put to use. The monitors reached Manila in time to assist in the joint attack on the city by Dewey's ships and by 11,000 U. S. Army troops sent from San Francisco to seize the city and occupy the Philippines. (The second Spanish fleet never arrived).*

This is the basis of the reference to the battle of 13 August made by Ensign Neel in his account of the monitor Monterey.

Monterey *took part in other activities around the Philippines during the next few years, and remained attached to the Asiatic Squadron until 1917. She was detached from the Asiatic station and assigned to the Pacific Fleet to be stationed at Pearl Harbor for the defense of that base and the support of submarines. She remained at Pearl Harbor as station ship until placed out of commission in August 1921.*

OLYMPIA led force that Monterey joined at Manila.



BOOKS

PLENTY OF GOOD READING TO BE FOUND THIS MONTH

IN AN EARLIER section of this issue containing a state-by-state roundup on voting you will have noted, in the rare event that you've overlooked the fact, that this is a presidential election year. To help you identify the principal actors in this quadrennial drama, two election guides have been selected for discussion this month. Chances are excellent that you can find these, as well as the other volumes mentioned here, in your ship or station library.

The **New Yark Times Electian Handbaak, 1964,** edited by Harold Faber, tells you just about everything you would want to know about the election, candidates and issues. Not only does it cover the 1964 elections, but it touches more than lightly upon the U. S. political scene in general —the history of the parties, past conventions, the current issues and party strategy, as well as the personalities, and a state-by-state roundup of congressional and national contests. It is, of course, written by the outstanding New York Times' political writers, and how authoritative can you get?

The other selection, **1964 Guide to Canventions and Electians,** swings an equal amount of weight. Although the basic facts are similar, the treatment varies somewhat between the two books. The *Guide* is primarily a reference book, but it also contains pertinent quotes from the outstanding candidates on almost any issue you can think of.

In any event, either of them will give you an excellent idea of what it's all about and will provide you with inexhaustible ammunition with which to face the inescapable political arguments.

Two other titles, **The McNamara Strategy,** by William W. Kaufmann, and **Pawer at the Pentagan,** by Jack Raymond, are of interest.

Drawing on Secretary McNamara's own statements and on those of his civilian assistants, Kaufmann outlines in an astute analysis the major defense objectives and the changes in the area of national security affairs during the Kennedy-Johnson administrations. Also included is a detailed examination of the current decision-making processes and methods within the Department of Defense. Many quotations in *Strategy* are from Hearings on Military Posture, Committee on Armed Services, U. S. House of Representatives, 1962. Another extensively quoted report is the Secretary's statement before the House Armed Services Committee on the fiscal year 1964-68 Defense Program and the 1964 Defense Budget, 30 Jan 1963. *Strategy* has been included on the list of selected reading by the SecNav Reading Program Advisory Committee.

Those people on the New York Times are a prolific lot. Not only did the political pundits whip up their *Handbook* just in time for election, but the *Times* Pentagon reporter, Jack Raymond, also has his say in *Power.* He points out that the Pentagon symbolizes the remarkable growth of military power during the last 25 years and discusses how it came into being, the people who make it work, and its effect on many crucial areas in our lives. He discusses these points, among others: the role of military leaders in public affairs and nonmilitary indoctrination of the armed forces; the effect upon educational institutions of government-financed research programs; and the relationships between men in the military and in industry.

After problems such as those discussed above, climbing Everest seems almost easy, and diving for lost ships to be pure escapism.

Judging by the number of books written about climbing Everest, we can't help but feel that, by this time, the trail should be fairly well packed down by the countless feet that have slogged over it—but apparently we're wrong. There is still no easy, nor casual, way. That's the message we receive from **Americans on Everest,** by James Ramsey Ullman. It took 70 men and almost half a million dollars to put three two-man teams on top—but they did it. Every phase and every facet of the operation is described in detail, sometimes by the men themselves, sometimes by the author, who was the official historian of the expedition. Considerable technical detail for the do-it-yourselfers.

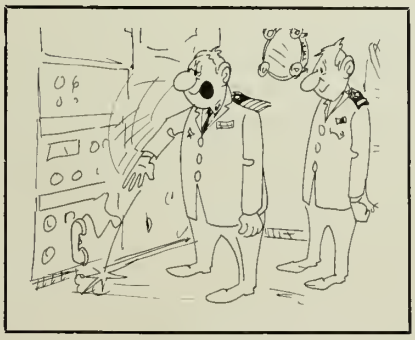
Meanwhile, in **The Last Ships,** Peter Throckmorton has found another last frontier—archaeological investigation under the surface of the Mediterranian Sea. He learned his field work—if it can so be called—from Turkish sponge fishermen who showed him wrecks no archaeologist had ever seen. When his formal expedition finally got under way, it was possible for him to conduct underwater archaeological excavation according to land standards. His prize was the remains of the oldest ship ever found—one more than 3000 years old.

For all its consequences, the battle between the British and French fleets off the Chesapeake was a remarkably casual and haphazard affair. At the time, no one was quite sure who had won but, in the long run, it seems the brash young United States was the undisputed victor. The battle itself prevented the British from relieving Cornwallis at Yorktown, which thus assured his surrender which, in turn, put an end to the war. The details are painstakingly described in **Decisian at the Chesapeake** by Harold A. Larrabee in what Samuel Eliot Morison has called the "best tactical account of the battle I have ever read."

Fools' gold and 14-carat suspense are to be found in **The Galden Keel,** by Desmond Bagley. It's a cloak-and-dagger affair concerned with the rumored hoard of gold and jewels hidden by Mussolini somewhere—usually—in the Alps. This time it's in the Med, and guess what constitutes the keel of the hero's ship. Numerous villains and a countess are also involved.

In Viva, by Mildred Savage goes to considerable length (700 pages) to record the trials, tribulations, drama and rewards involved in developing a new drug. After considerable infighting among officers of the company, the hero discovers the new formula at the last minute, is made head of the department and wins the girl in a Hollywood finale.

All-Navy Cartoon Cantest
Billups E. Ladge, LCDR, USN.



"I can never get the flagship an a single sideband—apen a part and gimme a megaphane!"

TAFFRAIL TALK

IT MAY BE A BIT difficult for a surface sailor to comprehend, but submariners become quite attached to their way of life. And they can become downright dogmatic about it.

One such Navyman is Senior Chief Electrician's Mate Enoch W. Pence, who's spent something like 33 years in the submarine service. He's had chances to get out—or rather, up—but each time he declined.

It all began back in 1928 when he enlisted and went right off to New London, Conn., to begin training for sub duty. Within three years he had qualified in both the O and R type boats and had orders to USS *Narwhal* (SS 167), one of a new class of submarines. He was hooked.

Pence took his discharge in 1932 after deciding to kick the habit. But as everyone knows, the only way to beat an addiction like *that* is to go cold turkey, and he didn't. Instead he chose to act like a civilian while leading a double life in the Naval Reserve, keeping up his submarine qualifications.

Consequently, by 1936 he could stay away no longer, and reenlisted in the Regular Navy as a fireman second. Somehow he wrangled himself a set of orders to a boat in SubLant. From then on there was no turning back.

He made third class early in 1941 and was promoted to EM2 on 1 December of the same year. That was in Pearl Harbor. Six days later he was helping replace the batteries in the submarine USS *Cachalot* (SS 170) when the first flight of planes came in.

During the first two years of the war Pence served aboard USS *Pompano* (SS 181) in the Pacific, making six war patrols to Truk, the Philippines and Japan. The sub sank over 21,000 tons of Japanese shipping.

After the sixth patrol Pence received orders to the commissioning detail of USS *Bream* (SS 243) in New London. He left Pearl and a few days later *Pompano* also left, for her seventh patrol. She never returned.

At that point many men would have been pulling strings for duty on, say, a carrier or cruiser. But not Pence. As a first class electrician's mate he helped commission *Bream*, rode her to the Pacific, and stuck around for two war patrols to the South Pacific. He was appointed EMCA in April 1944.

Between the war's end and 1950 he knocked around on several subs. Then he received orders to his first billet ashore—instructor duty in San Diego. Four years later the assignment people threw him his first curve, and he was issued a set of orders to the recommissioning detail of USS *Hancock* (CVA 19). A carrier yet. At least Pence was not alone . . . 29 other submariners were also on the detail.

The rules said a man must serve 18 months aboard a newly commissioned ship before applying for a transfer. Like a good sailor, Pence bore up. But, as soon as the prescribed time had elapsed, in went a chit requesting duty a little more along his line of thinking—like on a submarine for instance. The 29 other submariners also requested sub duty and 30 sets of orders came back.

The chief last re-enlisted in 1960, and is now going about his business in USS *Bluegill* (SS 242). He could have retired something like 12 years ago, but just couldn't see it. He's due to leave the Navy in 1966, but that's anything but definite—at age 57 he's seriously considering staying a few more years.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

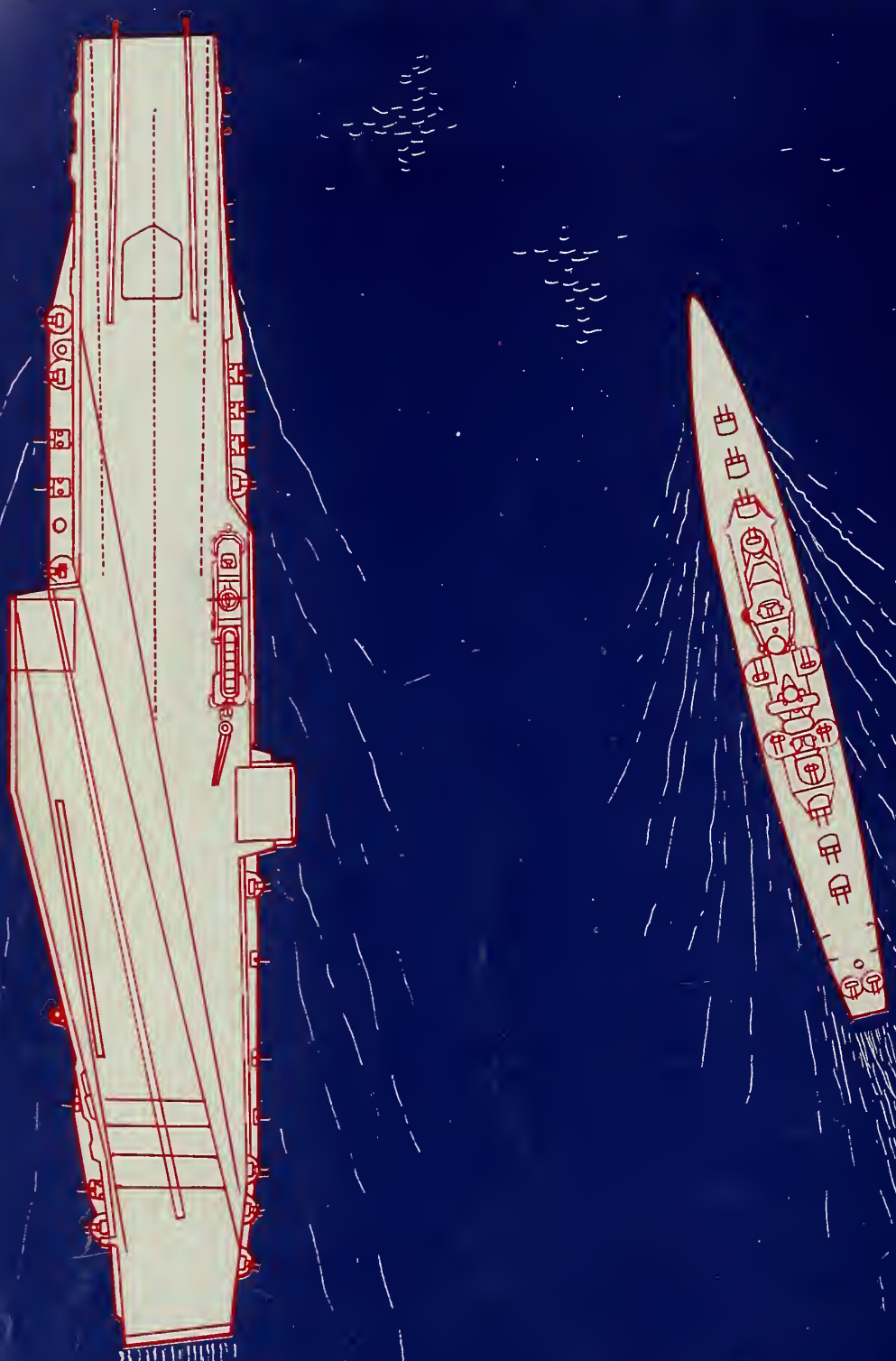
ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D.C. 20370.

• AT RIGHT: BATTER UP—Smiling Commissary Seaman Mark Root puts his knowledge of cooking on the line as he mixes a cake in the galley of destroyer tender USS Frontier (AD 25) homeported at Long Beach, Calif.



NIGHT WATCH-DAY WATCH



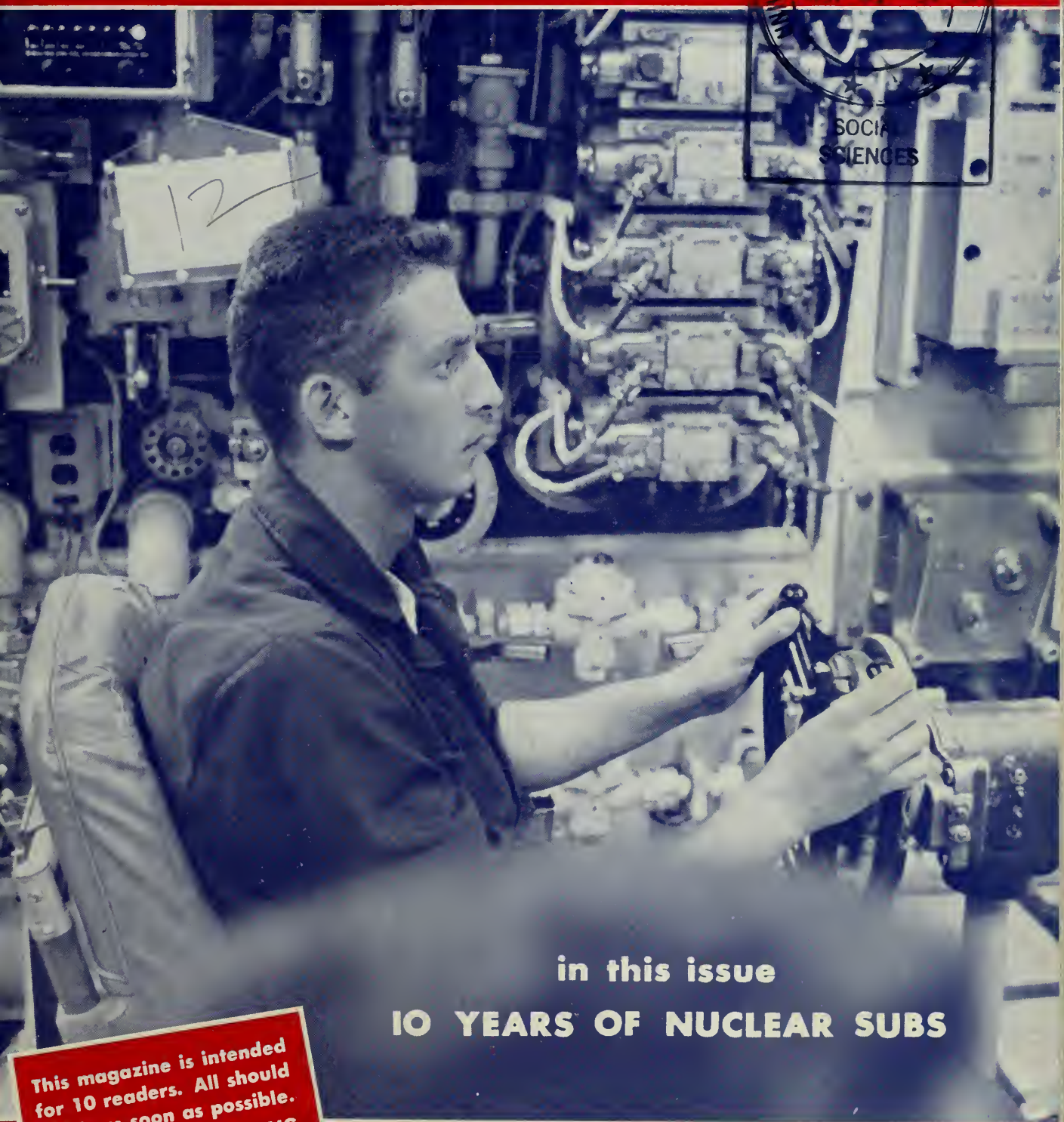
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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

SOCIAL SCIENCES



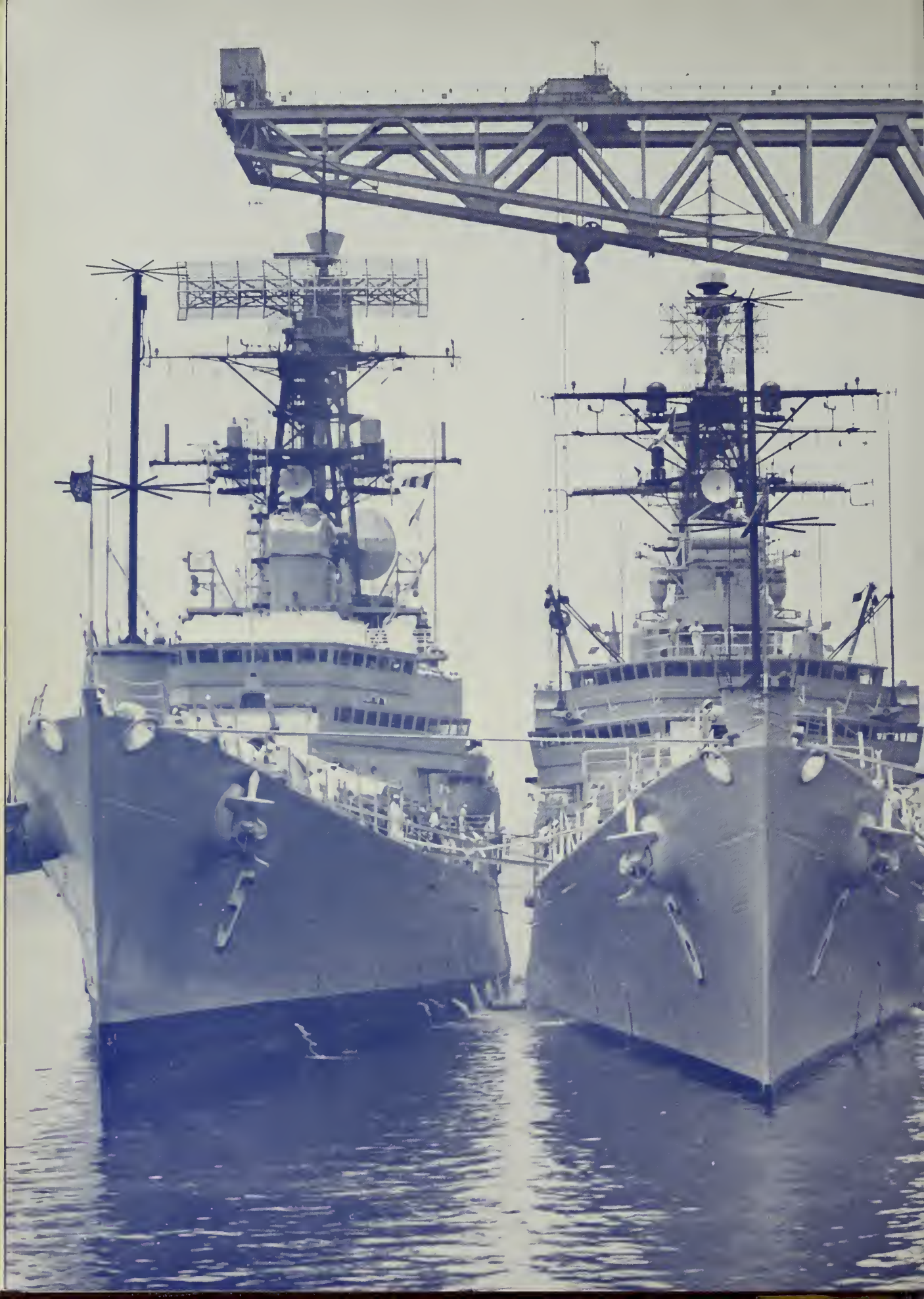
in this issue

10 YEARS OF NUCLEAR SUBS

This magazine is intended for 10 readers. All should see it as soon as possible. COPY ALONG

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OCTOBER 1964



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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

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• **FRONT COVER:** SOMEWHERE BELOW—Crew member of the fleet ballistic missile submarine *USS Lafayette* (SSBN 616) keeps a watchful eye and a steady hand as he mans his station while on patrol in the deeps of the Atlantic.

• **INSIDE FRONT:** SIDE BY SIDE: *USS Oklahoma City* (CLG 5) moors by *Providence* (CLG 6) at Yokosuka, Japan, as *Oklahoma City*, fresh from overhaul, readies to relieve *Providence* as flagship of the Seventh Fleet. CLG 6 returns to the States after stops at Australia and Pearl.

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FIRST IN—*USS Nautilus* (SSN 571) was the first true submarine. *Rt: Polaris*-armed *USS Nathan Hale* surfaces.

Nuclear Subs: The First

WHEN NUCLEAR power became a reality, another beachhead was established in the strange war the submarine service has fought since its beginning—the war of technology. At the start of this war the main objective of the submariner's battle was to make his ship work at all. Since then, the problem has always been how to improve the ship. A solution to this problem is nuclear power.

Nuclear powered submarines have revolutionized naval warfare.

These remarkable vessels can remain submerged for months, completely independent of our atmosphere. They can travel for years without refueling. They can go where no other vessels can go. They can hide, run fast and attack viciously—from close in or from 1500 and, soon, 2500 miles out.

Most of us are by now familiar with these highly publicized capabilities and, unbelievable as they seem, accept them as SOP. Less known are some sidelights on how the nuclear sub came into existence 10 years ago, and what this means to the Navy.

For centuries, since Alexander the Great, men sought to develop a submersible war vessel which could operate stealthily, unseen and unheard, to make surprise attacks.

Of the many Americans whose contributions helped transform this idea through its developmental stage and into the modern nuclear powered submarine, the names of David Bushnell, Robert Fulton, Simon Lake, John P. Holland and, most recently, Vice Admiral Hyman G. Rickover are prominent on the submarine roster.

Britain's Royal Navy was the world's most powerful in 1805, when a zealous Robert Fulton demonstrated his submarine's potential and offered it to the British. They refused—but not because the Admiralty was blind to the possibilities such a vessel offered for the waging of naval warfare.

They refused because Britain did not want to aid the development of submarines for fear that, if they were successful, other nations would build them and thereby gain a means with which to attack the mighty British Fleet.

THIS PRESENTIMENT was well justified, as history testifies. But even before Fulton's demonstration, in which he sank a target brig with his submarine *Nautilus*, the British had received a practical demonstration in submarine warfare.

David Bushnell, a Connecticut Yankee who made the first American submarine, sent his egg-shaped vessel *Turtle* to attack British ships blockading New York harbor during the Revolutionary War. Rudimentary as it was, *Turtle* could deal destruction. A one-man crew, hand-operating the propellers, could drive the vessel on a submerged approach, screw a time bomb into the wooden hull of an enemy ship, then retreat.

Unfortunately for Bushnell, *Turtle's* first choice for victim was HMS *Eagle*, which happened to have a copper hull. Though unable to plant its charge, *Turtle* startled the British sufficiently, and giving this weird submarine its due respect, they moved their blockading force further to sea.

Bushnell's one-man contraption went to battle unassisted, against a greatly superior force. Even in its failure it proved that a submersible warship would be most valuable. A powerful naval force without the means of counteracting such an attack would find itself at a great disadvantage against an adversary that had a lead in submarine development.

SO IT WAS, later in history, that a much inferior naval force—the Confederate States of America—was responsible for the first sinking of a warship by a submarine.



USS Hale shows off her atomic power.

Decade

Several unsuccessful attempts to develop a reliable submarine had been made by others (besides Fulton and Bushnell) before Confederate inventor H. L. Hunley set his mind to developing a submarine capable of making surprise torpedo attacks on Union warships blockading the South. His end result was the submarine CSS *Hunley*—a reworked cylindrical boiler 48 inches in diameter, 35 feet long. The propeller shaft was turned by an eight-man crew.

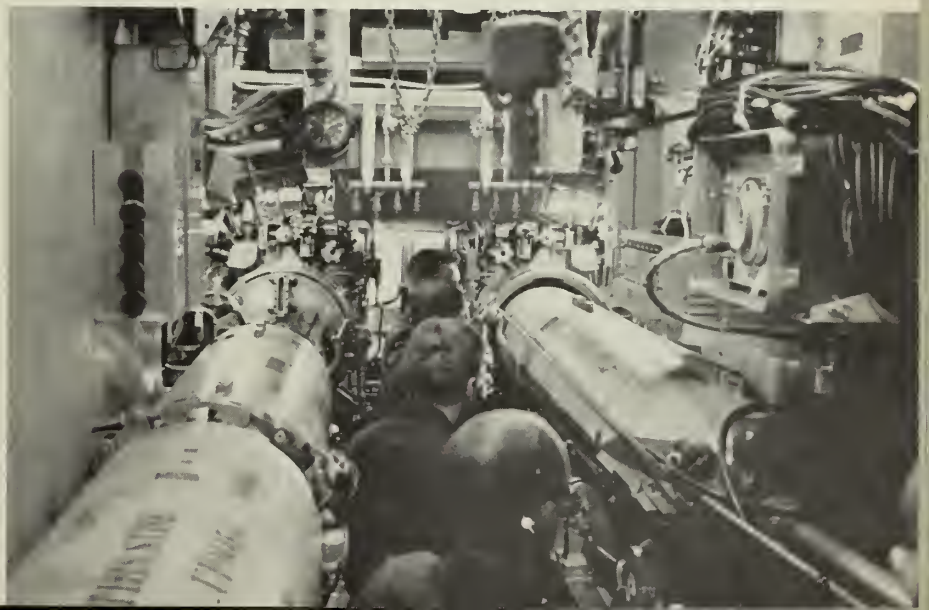
Hunley took 35 crewmen's lives on five unsuccessful trial runs, but it was eventually considered ready for action and was armed with a bomb mounted on a 22-foot spar. On 17 Feb 1864 the aggressive *Hunley* labored toward the steam sloop USS *Housatonic* in Charleston harbor, appearing to the unfamiliar eye as a huge slab of floating driftwood.

Housatonic's watch officer spotted the approaching danger and sounded the alarm—but too late. *Hunley's* bomb hit home, so successfully, in fact, that the explosion sent both vessels to the bottom.

As we know, submarines have come a long way since that era. To get an idea how far, it is necessary only to compare two submarines named *Nautilus*. About 160 years ago there was Fulton's sail-rigged, hand-cranked craft. Ten years ago



WATER WINGS—Nuclear-powered *USS Dace* (SSN 607) cruises on surface. *Below:* Crew members man stations aboard *USS Lafayette* (SSBN 616).







SOME DIFFERENCE—WW II electric-diesel subs, like *USS Flasher*, sank many ships. *Rt: USS Holland* on cruise in 1900.

the sleek, nuclear-powered SSN 571 slid down the building ways at Groton, Conn.

SSN 571 was, on her commissioning date, the latest development in a line of U. S. Navy submarines which ran back over 50 years to the 53-foot *Holland*, the Navy's first. In contrast to Fulton's *Nautilus*, which could make a submerged run of 50 yards in seven minutes and remain submerged at 25 feet for one hour, SSN 571 can sail around the world submerged, sustaining speeds greater than 20 knots and depths greater than 300 feet (the speed and depth capabilities of U. S. nuclear-powered submarines are classified).

BUT THE comparison can be updated considerably. Nuclear-powered subs represent a drastic improvement even over submarines relied upon for combat strength as recently as World War II.

Before *Nautilus* got underway on nuclear power no navy had ever possessed a true submarine. Submersible ships, yes—submarines, no. To be a true submarine a vessel must be capable of operating underwater for prolonged periods, completely self-sustaining in its underwater environment. To date the "nukes" are the only submarine vessels which possess this capability.

Conventional subs are powered by diesel engines on the surface, or by large electric storage batteries while underwater. They are strictly limited to the endurance of their batteries when submerged, the time measured in hours rather than months.

It is possible to run the diesel engines underwater, using a snorkel to pipe down air from the surface. But this restricts the sub to snorkel depth, increases the possibility of the submarine being sighted, and creates quite a noise, which can be picked up by underwater listening devices more easily than the comparatively quiet electric motors.

The conventional sub's dependence on the earth's atmosphere, therefore, limits its capabilities.

The Navy's search for an answer to these shortcomings started before World War II. In fact, the First World War had already shown that submarines could play a major role in any nation's efforts to control the seas. To make the most of this role, a more effective submarine with greater underwater endurance was needed.

Research in the field of advanced power plants began in the 1930s at the Naval Research Laboratory. Chemical-burning plants were considered, but these, like the diesel, would require oxygen for combustion.

CONSIDERATION was also given to the use of atomic power. Scientists were aware that large amounts of nuclear energy were released in space. The problem was to find a suitable method for releasing and controlling this energy—after finding a source available on earth. If this could be done, a radically new power plant would be in the making.

The breakthrough came in 1938, when German researchers produced nuclear fission by bombarding uranium atoms with neutrons. This served to split the uranium atoms and, in the process, a tremendous amount of energy was released.

The significance of this discovery lay in the fact that energy, in the form of heat, was being produced without combustion—the process did not require oxygen. Scientists calculated that if large numbers of uranium atoms were split in a short period of time, the amount of energy released would be far greater than could be obtained from any other known source of energy.

Then came the problem of harnessing this nuclear energy and converting it to power.

Dedicated to the proposition that this problem could be solved Vice Admiral (then Captain) Rickover headed a government-industry team that developed nuclear energy for ship propulsion. For his services as Chief of the Naval Reactors Branch, Division of Reactor Development, U. S. Atomic Energy Commission, and as Director of the Nuclear Power Division, BuShips, from March 1949 to July 1952, VADM Rickover was awarded his second Legion of Merit. His citation reads, in part, "Displaying exceptional talents in the field of mobile power reactors and exercising unceasing drive and energy, Captain Rickover, more than any other individual, is responsible for the rapid development of the nuclear ship program." For his continuing role in this field, VADM Rickover has also received two Distinguished Service Medals, the highest peacetime award given by our government.

In this new development nuclear energy is used to heat a primary coolant (pressurized water) which is piped through the reactor compartment to a steam generator. In the steam generator the primary coolant transfers the heat to water in a secondary system to develop steam, which then drives the submarine's twin turbines.

PROTOTYPES of these revolutionary power plants were built and installed in land-based submarine hulls. Next came the ships themselves.

Congress appropriated funds for construction of the first atomic submarine on 1 Jul 1951 and the Navy let a contract the following month. The keel of what was to become the record-shattering *USS Nautilus* (SSN 571) was laid the following June.

While *Nautilus* was abuilding, extensive tests were being performed on the prototype reactor power plants. Long before *Nautilus* went to sea for the first time, one of the land-based, atom-propelled "submarines" was steaming at full power in the Idaho desert.

On 10 Mar 1953 the plant "went critical" – that is, a self-contained, controlled nuclear chain reaction took place within the reactor. On 25 June that year the reactor reached full power, and a simulated Atlantic crossing began.

Navy crewmen assigned to the prototype stood regular four-hour watches, and a great circle route from Nova Scotia to Ireland was plotted. Four days later the land-locked "ship" had crossed the Atlantic, traveling a simulated distance of over 2000 miles at unprecedented speed. The prospects for realizing success with the nuclear-powered submarine concept mushroomed.

Creature comforts were as important a consideration as propulsion for a submarine designed to stay submerged for any length of time, so *Nautilus* was meanwhile receiving some choice items from BuShip's "habitability package shop." The new sub was to be new in every way, and one of the most appreciable changes was in size. *Nautilus* grew to have about twice as much living space as conventional subs, and even had a staircase installed—another submarine first. Fiber glass bunks with sponge rubber mattresses were added to the luxury and there was, of all things, a juke box. Things were really looking up. Soft colors brightened the decor.

CREWMEN aboard *Nautilus* were also to be something special—combination submariners and physicists. All volunteers selected for the crew, regardless of rate, were ordered to duty at the Bettis Plant of the Atomic Energy Commission. Their training included instruction in the theory, design, construction and operation of nuclear submarine propulsion machinery. Theoretical subjects such as college algebra, physics and analytical geometry provided the basis for understanding the complex systems and equipment involved.

Practical courses in circuits, hydraulic test loops and stainless steel welding were included, as were courses in blueprint reading, metallurgy and reactor engineering.

Then, having been dry-land sailors for nearly three years, they headed for the Submarine Base, New London, and a refresher course in submarine seamanship. Even CDR (now Rear Admiral) Eugene P. Wilkinson, USN, the designated skipper of the first A-sub, took the training.

On 21 Jan 1954 Mrs. Dwight D. Eisenhower smashed the traditional bottle of champagne against the bow of *Nautilus*. The commissioning ceremonies were held eight months later, on 30 September. *Nautilus'* nuclear power plant was first operated on 30 December, and full power was developed in dockside tests four days later.

On 17 Jan 1955 the ship left the builder's piers for initial sea trials, signaling its famous message "Under way on nuclear power" as it headed out to sea. After an extended series of tests and trials, the 324-foot *Nautilus* was accepted by the Navy for unrestricted service on 22 Apr 1955.

AS AN OPERATING unit of the Fleet, *Nautilus* soon rewrote the sub-

BIG 'BULLET'—Sub tender *USS Proteus* (AS 19) loads *Polaris* aboard *USS Patrick Henry* (SSBN 599) in Holy Loch.



marine record book. In May 1955 the ship steamed from New London to San Juan, P. R., completely submerged, traveling 1381 miles in 89.8 hours and maintaining an average speed of 16 knots. This was the greatest distance ever traveled completely submerged by a submarine, the longest period ever completely submerged, and the fastest speed ever maintained for such a distance.

Two years went by and *Nautilus* steamed 62,556 miles (over the 20,000 leagues of Jules Verne's fictional *Nautilus*). To cover the same distance, a conventional submarine would require 2,170,000 gallons of diesel oil—enough to fill 217 railroad tank cars, which would form a train two miles long.

Shortly after refueling for the first time, *Nautilus* made a trip to the west coast of the U. S., via the Panama Canal, to acquaint Pacific Fleet forces with her remarkable capabilities. In Seattle the ship's first CO, CAPT Wilkinson, was relieved by CDR William R. Anderson, USN.

CDR Anderson immediately began making plans for an Arctic trip. But his first orders were to take *Nautilus* back to New London. During the two-month cruise from New London and back *Nautilus* steamed 17,213 miles, 14,900 of them submerged. All travel between New London and San Diego and return, except for Panama Canal transits, was submerged. The ship was establishing unbelievable records, but the biggest were yet to come.

In October 1957, *Nautilus* reached latitude 87 North—180 miles from the North Pole, and further North than any previous ship had gone.



HIGHEST PEACETIME AWARD—VADM H.G. Rickover receives DSM from SecNav W. B. Franke in 1961 for role in nuclear ship development.

She steamed 1383 miles under the polar ice cap on three trips lasting a total of five and one-half days. On her way to the Arctic *Nautilus* completed a dive of 287 hours, covering 4039 miles.

THIS POLAR TRIP was of great scientific importance. In the area in which she operated *Nautilus* gathered more data on ice characteristics and water depths than had ever been obtained before.

On 26 Apr 1958 *Nautilus* again departed New London for the Pacific. She visited ports on the West Coast and operated with Pacific Fleet units near Hawaii.

On 23 July the A-sub departed Honolulu and, after a rapid submerged voyage through the Bering Strait, went under the ice off Point Barrow, Alaska. She proceeded due North to become, on 3 August, the first ship in history to reach the North Pole. Following this historic achievement, *Nautilus* proceeded under the ice pack and emerged in the open waters of the Greenland Sea west of Spitsbergen, and continued south into the Atlantic to become the first ship to make the Northwest Passage via the Polar route. The world cheered this historic accomplishment.

WHILE *Nautilus* and, later, her sister ship *Seawolf*, took nuclear power to sea for the first time and proved its tremendous capabilities, new muscles were under construction for the submarine service.

The next four atomic subs—of the *Skate* class—marked the end of the "experimental" phase of nuclear-powered submarines.

The first of this new class, USS *Skate* (SSN 578) was not long in establishing herself as a worthy member of the SSN force. On 4 Mar 1958 she completed the fastest submarine transatlantic crossing on record from the U. S. to England, traveling 3161 miles in 203 hours.

Later that year USS *Seawolf* (SSN 575) surfaced after 60 days underwater without contact with the earth's atmosphere, during which time she logged over 13,700 miles.

The evolution of the nuclear submarine continued with the construction of attack subs for the Fleet, of which there are now three classes. All are nuclear-powered. Nuclear subs have since filled the record books with such incredible feats as steaming around the world submerged and rendezvousing and surfacing at the North Pole. They have easily fulfilled their initial theoretical potential.

With them came another major innovation, this time in the hull design of submarines. The *Skipjack* class subs were the first "nukes" to receive the so-called tear-drop hull, designed for increased underwater speed and maneuverability. Another radical change was the positioning of the diving planes (to control the angle of ascent or descent) on the sail of the ship instead of the bow.

The search for the true submersible had almost been completed—yet one thing was still lacking. That was the combination of its stealth and maneuverability, with the capacity to deliver tremendous damage and destruction while remaining submerged. That goal was also being approached by the Navy.

LEARNING BIZ—Students at sub school make dive in control room mockup.







DEEP SUBJECTS—*USS Triton* set record with round-the-world cruise. *Rt: USS Skate* breaks ice at the North Pole.

WITH THE ADVENT of the *Polaris* missile (see ALL HANDS, September 1960), the nuclear-powered subs were soon to become a mainstay of our national defense strategy.

Guided missiles opened up a new field in submarine warfare. For the first time, submarines would have a capability of destroying enemy submarines and surface craft at their bases and of neutralizing the building yards and supply depots.

Realizing the missile would offer a powerful and new offensive weapon, the Navy developed two submarines which were equipped to launch the *Loon* missile. Its potential was dramatically demonstrated in 1949 when, on maneuvers, a sub successfully launched a *Loon*.

The *Loon* was followed by the *Regulus*, an airbreathing guided missile that can deliver havoc to any enemy. USS *Halibut* (SSGN 587) was constructed to deliver five of these missiles and, with four conventional *Regulus* launching submarines, has been a member of our nuclear deterrent force for the past five years.

On 28 Nov 1955 the Navy announced plans for having nuclear submarines, capable of firing missiles from submerged positions, operational by 1962. Preliminary work was started, but in 1957 the Secretary of Defense gave the program urgent priority, with a target date of 1960.

Faced with a race against time, a Navy contractor redesigned plans for an existing nuclear attack submarine, adding a 130-foot missile compartment and providing space for highly sophisticated navigational, stabilizing and fire control systems. At the time, much of this equipment had not even been designed. Space aboard the submarine was allocated and manufacturers were advised to build the equipment to fit the space, an unorthodox procedure that worked because of the close cooperation of the Navy-industry *Polaris* team—a team of more than 11,000 industries across the country.

When designs were approved, the shipyard began construction of *George Washington* (SSBN 598), the first Fleet Ballistic Missile submarine. The ship, one of the most complex ever built up to that time, was launched just 18 months after work was started, and was commissioned in another six months, marking an unparalleled shipbuilding accomplishment.

THE MOST significant milestone in the program came on 20 Jul 1960, when *George Washington* fired two *Polaris* missiles from a submerged position off Cape Kennedy. The ship wired the President: "*Polaris*, from out of the deep to target . . . Perfect."

Since then, every *Polaris* submarine in commission has made successful submerged firings, and one, USS *Ethan Allen* (SSBN 608), launched a live missile during 1962 atomic tests in the Pacific.

It was not until *Ethan Allen*, launched in 1960, that the Navy had an FBM submarine designed as such from the keel up. Following the *Allen* class was the *Lafayette*, a longer and heavier class which incorporated ideas resulting from patrol experiences. One of the principal features of this class is greater habitability to ease the rigors of *Polaris* patrols, which last for about 60 days.

From a military standpoint, the *Polaris*-armed submarine offers certain unusual advantages as a deterrent and retaliatory weapon. Its launching position cannot be zeroed in for a surprise attack. Its angle of missile fire cannot be calculated in advance for aiming a counter missile, should such a weapon be developed. The target represented by a submarine is mighty small for attack by ballistic missile—even if that target's approximate location were known in advance.

By moving around, such a submarine can completely upset attack calculations applicable to fixed launching positions. Its very mobility, as well as its underwater concealment, calls for wide dispersal of enemy search forces.

ANOTHER FACTOR that greatly increased the capabilities of the submarine is deep submergence. When the third dimension of depth is greatly increased, the anti-submarine tactical problem is made more difficult. Antisubmarine weapons must be designed to travel faster and farther underwater and have enhanced guidance and target-seeking capabilities.

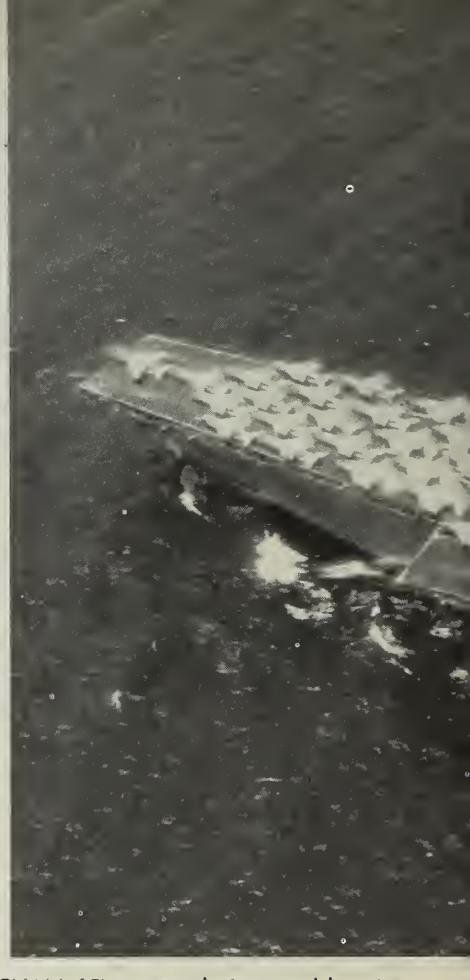
On board *Polaris* subs, the crews work under conditions that can only be described as luxurious by early submarine standards. Interior space is roughly twice as great as that in conventional subs, as we mentioned earlier. In addition, due to the ability and, in wartime, the necessity, to stay underwater indefinitely, great care has been taken to make the submarine's living spaces particularly suited for around-the-clock occupancy.

If the long leap to nuclear power for submarines has been swift, the events which have followed in the 10 years of nuclear propulsion have been no slower. In this decade 92 nuclear submarines have been authorized by Congress, of which well over a half have been launched and over a third commissioned.

What's most important is the mating of the nuclear submarine with the *Polaris* missile, thus giving us one of our primary deterrent weapons—the nuclear-powered fleet ballistic missile submarine.

—Bill Howard, JO1, USN





ON CRUISE—Visitors observe flight operations from bridge of *USS Enterprise* (CVAN 65) at sea during world cruise.

In Orbit Under Nuclear

THE WORLD'S FIRST all-nuclear surface task force was formed last June when USS *Enterprise* (CVAN 65), *Long Beach* (CGN 9) and *Bainbridge* (DLGN 25) met at a rendezvous point in the Mediterranean Sea.

An atomic task force has been desirable since September 1961 when *Long Beach* was commissioned in Boston, Mass. Nuclear ships had many advantages over older types, but tacticians knew that for the time being the ships would be limited by the non-nuclears in their company. Theoretically, a nuclear powered ship in a conventional force might as well be dragging her sea anchor.

That's exactly the way it turned out.

Enterprise can steam for years without refueling. She can maintain high speeds indefinitely but, when she operates with conventional groups, is restricted by concern for their economical cruising speeds and can go no further than she can supply them with fuel, either from herself or from tankers.

Bainbridge once crossed the Atlantic with a fossil-fuel task group during rough weather. Progress was frequently delayed while the flagship turned into the sea and refueled the escorts. *Bainbridge* was forced to loaf along at a fraction of her speed, then mark time while the other ships satisfied their appetites for black oil.

LONG BEACH had similar problems. Finally, when enough nuclear surface ships to form a task force had been commissioned and thoroughly tested, the problem was solved. Operating with their own kind, the ships can now maneuver and maintain their maximum speeds without regard for the logistic problems common to conventional forces. Unencumbered, they can make the most of atomic power.

Offensively, the trio are probably the most formidable group ever deployed by any navy. *Enterprise* can launch an attack, either nuclear or conventional, with a number of aircraft, including the all-weather attack bomber A5 *Vigilante*, the Mach II F4 *Phantom II* (which can double as an interceptor) and the A4 *Skyhawk*. The operation could be backed up by the *Talos* missiles of *Long Beach*.

The force is guarded against surprise attack in several ways. *Enterprise* carries the E2A *Hawkeye* radar plane—often called the *Willie Fudd*—which can be stationed as an airborne picket. In addition, *Long Beach* and *Enterprise* are equipped with the new long-range non-rotating radar antennas.

An enemy attack by air would be met by the carrier's 1000-mph F8 *Crusaders*, the *Phantom II* fighter-bombers, or the *Terrier* missiles carried by two ships in the force. Attack from under the sea would be countered with *Asroc* missiles from both *Long Beach* and *Bainbridge*.

Any ship is less open to atomic

SEA ORBIT—Nuclear powered surface ships steam side by side. *Below:* Jets ready for launching from *USS Enterprise*.

Power

attack than a fixed target. The nuclear task force, by virtue of its high speed, is even less vulnerable than others. Experts believe, for instance, an ICBM attack would be completely futile. During the time lapse between the missile's pre-flight alignment and the firing order, the task force would be elsewhere.

And, if the group *should* come under attack, it is less susceptible to battle damage than conventional forces. All oil-burning ships have air intake vents which supply the boilers with air—if these are blocked by wreckage or must be sealed off due to fallout, the fires cease to burn.

Nuclear reactors, on the other hand, operate without oxygen.

PARTICULARS about the nuclear reactors are classified, but the basic theory may be found in most high school physics books. All ships in the force carry pressurized water reactors much like those which power nuclear subs. *Enterprise* has eight





NUCLEAR NAVYMEN relax on world cruise and watch *USS Long Beach*.

of these. *Bainbridge* and *Long Beach* each have two.

Aside from the ability to maintain high speed and cruise for almost unlimited range, which are the most important points for nuclear power, there are several incidental advantages. Perhaps the most publicized of these is the lack of smoke.

The lack of smoke also contributes to more effective operation of topside gear, slower deterioration of delicate machinery, aircraft and equipment and, most notably, pilot safety while landing aboard the carrier.

From the seaman's point of view, this means less work. Smoke is largely responsible for the rapid tarnishing of brightwork, for grimy bulkheads, and for the greasy lint which settles on overhead pipes and around hatch cowlings.

On request from the bridge, the reactors can produce full power on a moment's notice, an extremely important asset in an emergency. On conventional ships there is a time lapse—sometimes as much as 30 minutes—while the black gang builds up steam pressure.

It's been said the nuclear task force could remain at sea until either the hardtack ran out, or the crew went stir-crazy. Either eventuality would take quite a while.

Because the ships do not carry fuel oil they have more space for food, ordnance gear, typewriter ribbons, repair items—anything which might be needed on an extended and independent voyage. This is especially important on the carrier, for she must carry fuel for her aircraft.

And, as for the crews going stir-crazy . . . a ship is a ship, but *Enterprise, Long Beach* and *Bainbridge* rank with the best when it comes to habitability. All spaces are air-conditioned. Each bunk has a separate cool air outlet, a reading light and a foam rubber mattress. Lockers are extra large. There are lounges and a library. And the chow, according to those who should know, is excellent.







APPROXIMATELY one month after the formation of the all-nuclear force, Rear Admiral Bernard M. Strean, task group commander, announced that the group would be relieved in the Med one month early and proceed home the long way—eastward. Down the coast of Africa, across the Indian Ocean and the South Pacific. Around Cape Horn, up the east side of the Americas to their home ports on the east coast of the U. S.

The 6000 men deployed with the task force greeted the news warmly. Although the new orders would keep them away from home an extra month, there were compensations. How many men can say they've circled the globe?

Training was the prime reason for the long voyage. Soon after the sailing orders had been made public the late Admiral Claude V. Ricketts, Vice Chief of Naval Operations, said the Navy hoped to gain experience in long distance operations as well as to familiarize the nuclear surface crews with infrequently visited ocean areas.

In emergencies nuclear ships—both surface and sub-surface—could be ordered halfway around the world on moment's notice. Atomic submarines have made several globe-circling voyages, but surface ships hadn't had the chance.

Enterprise is too large to pass through either the Suez or the Panama Canals, so the task force will go around both the Cape of Good Hope and Cape Horn, crossing the equator at least twice. During the entire cruise the ships will not refuel or replenish. If they stop at any ports before reaching the States it will be for diplomatic reasons and to give the crew some liberty.

Things were different back in 1907-09 when the Great White Fleet made the circumnavigation. They were forced to make frequent stops to take on coal and other supplies, and the voyage stretched into 14 months.

But that was the old Navy. *Enterprise, Long Beach* and *Bainbridge* will take their time and reach the eastern coast of the United States about 60 days after leaving the Med.

They should be home in time for the launching of the Navy's fourth surface nuclear vessel, *Truxtun* (DLGN 35). —Jon Franklin, JO1, USN



SHIP OF THE DESERT—*Desert Ship* (LLS 1) fires *Talos*. *Below:* Three-dimensional plotter tracks missile's flight.

Desert Ship in Action

Ships are usually built to go to sea, but not always. There's one such ship that will never single up its lines. It's homeported in the south central New Mexico desert.

It's not actually a ship; it's a concrete building at the Naval Ordnance Missile Test Facility, White Sands Missile Range, N. M.

It may not look like a ship from the outside, but the interior makes a sailor feel right at home. Such terms as "deck," bulkhead" and "ladder" are used as often in this ship as the seagoing variety.

The men of the desert Navy have named their sand and tumbleweed vessel appropriately—*Desert Ship* (LLS 1). LLS means landlocked ship, of course.

Missile testing is what happens at the *Desert Ship*. The *Talos* surface-to-air guided missile—the same type as used by the new guided missile cruisers—was tested there.

With *Talos* already operational, *Desert Ship* tests the newer versions of the missile. New radar systems destined to replace those in the Fleet are also tested.

Facilities in the *Desert Ship* include machine shops, missile assembly and checkout buildings, and a tall steel tower used to launch the *Aerobee* upper-atmospheric research rocket. This rocket is used for probes into space; it provides information for the National Aeronautics and Space Administration (NASA), Air Force, the Naval Research Laboratory and other government and scientific agencies.

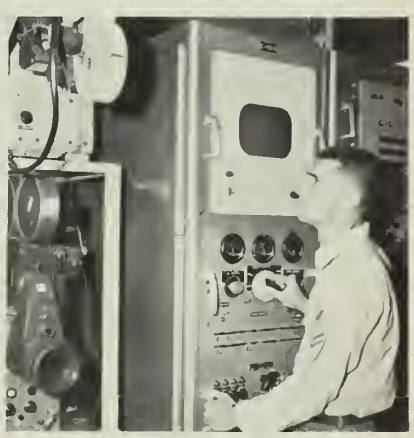
Everyday operations and administration of the *Desert Ship* employ the knowledge and experience of 13 ratings, including GM, RD, MT, FT, IC, ET, EM, MM, EN, YN, SF, PH and HM.

Construction of the *Desert Ship* began February 1952 and was completed June 1953. It was built to determine whether guided missiles and associated equipment would be practical aboard ships. *Desert Ship* proved that they would.

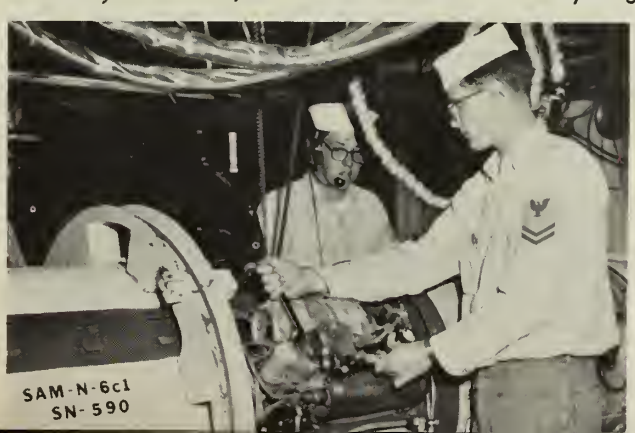
The first tests were concerned with a ram-jet engine missile, the forerunner of today's *Talos*. Since then, the landlocked ship has fired over 600 missiles, rockets and test vehicles for the Navy, Air Force, NASA and other agencies.



BELOW: Cameras make a visual record of missiles fired from *Desert Ship*.



GETTING SET—Navy missilemen make sure everything is A-OK with the guided missile before it is launched.









Navy Sports:

BASKETBALL GAMES, championship volleyball play-offs, badminton, ping-pong. Location, local YMCA, Any Old Town USA?

Not so in this case—it's the hangar bay of the world's largest warship, the nuclear powered aircraft carrier *USS Enterprise* (CVAN 65)—at sea—cruising around the world.

Enterprise can be considered a city within herself. The 85,350-ton ship is over 1100 feet long, has a width of 252 feet at the flight deck, enough air-conditioning to serve over 400 homes, can produce enough fresh water daily to supply over 1400 homes. Her height is equal to that of a 25-story building and, if her blueprints were laid end to end, they would cover an area large enough for 35 full-length football fields.

So, with all that room there is space for sports. During holiday routine aboard the *Big E*, the crew breaks out the portable athletic equipment, and the games are underway.

This story was written during the world cruise made by *Enterprise, Long Beach* and *Bainbridge* as Task Force ONE, the Navy's first nuclear powered surface











Nuclear Style

task force, under the command of Rear Admiral Bernard M. Strean.

During the cruise the *Enterprise* Special Services department sponsored the "Sea Orbit" sporting activities, including basketball, volleyball, badminton, boxing and ping-pong. Teams composed of the various squadron personnel vied for the honor of being champions and having their team names inscribed on a plaque displayed on the quarterdeck.

The last games were in process, most of them had been completed for the day. Now the word was passed to take down the athletic gear, play time was over. *Enterprise's* crew was ready once again for action—if the need ever arises.

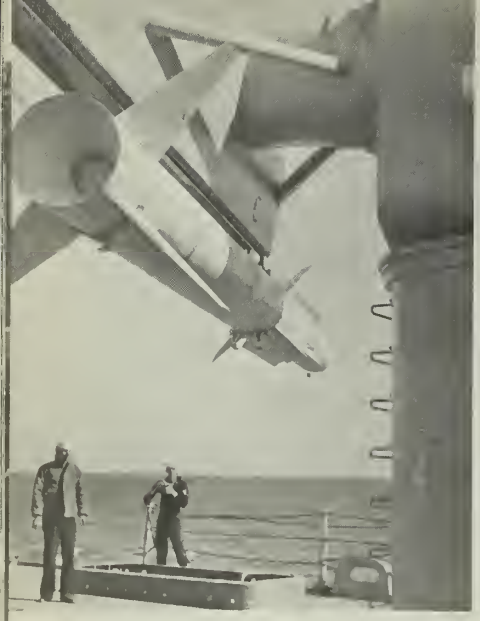
Clockwise from upper right: (1) USS *Enterprise* (CVAN 65), site of Sea Orbit activities. (2) Organizing a team. (3) *Skyraider* background for volleyball championship. (4) Participants: *Enterprise, Long Beach, Bainbridge.* (5) Let's clear a playing area. (6) Replacing a jet after games. (7) Badminton in hangar bay. (8) Work when games are over. (9) Table tennis silhouette against ocean backdrop.

Story by: Russ Egnor, JO2, USN
Photos by: M. E. Nuttall, PHC, USN









TERRIER (above) is no stranger to Guided Missile School graduates.



CLASS — Trainees learn principles of missile guidance systems. *(Below)* FBM students see the tube from which the *Polaris* missile is launched.







TRAINEES repair power supply *(left)* and prepare to align radar.

Dam Neck—A Darn

IN THIS AGE of missiles and space exploration, it is not surprising that the Guided Missiles School, Dam Neck, Virginia Beach, Va., is one of the fastest growing activities in the Navy.

Since it first started in 1962 the school has grown from a handful of people, training in the *Regulus* missile in a World War II temporary building, to more than 200 people working with the most modern missiles and equipment in the most modern facilities.

And it is still growing.

The mission of the Guided Missiles School is "to supply the Fleet with personnel trained in the operation, maintenance and repair of guided and ballistic missiles and missiles systems." The emphasis is on maintenance and repair, and the operation is essentially limited to individual components of the systems.

The school is made up of what could be three different schools.

- The first is the Missile Technician Class "A" School. Here the student acquires an introduction to the basic principles of ballistic missiles.
- The second major area is in surface-to-air missiles. Studies in the Surface Missile Systems (SMS) department include the Navy's three "Ts"—*Terrier, Talos,* and *Tartar* missiles.
- The third major area covers the fleet ballistic missile. Here, the *Polaris* missile system is studied.

Student quotas at the Guided Missiles School are all controlled by the Bureau of Naval Personnel. A GCT/ARI combination of 115 is required of all Basic MT "A" School students. Advanced courses in the FBM and SMS departments require that the students be career designated with six years of obligated service.

STUDENTS AT DAM NECK RANGE from new seamen right out of boot camp (who attend the "A" school) to admirals. The latter receive instruction in the *Polaris* Orientation Course.

The "A" school students have been given an opportunity to volunteer for the *Polaris* program if they have shown native ability in electronics fields, as demonstrated by their Navy Classification scores. But, just as a certain number of students wash out of college after gaining entrance through college board examinations, so do some of the "A" school students fail in the missile program. The current academic casualty rate is about 15 per cent.

It's an interesting, challenging and rewarding course.

The "A" school provides 22 weeks of instruction in which the student is taught basic electricity, electronics and the fundamentals of ballistic missiles. Upon completion of this course, those men who are destined for submarine duty go to Submarine School and, after qualifying for submarine service, return to the Guided Missiles School for advanced *Polaris* training.

In the surface missile systems department the course expands to include systems training in individual SMS components. These are complete missile systems, or partial systems, installed at the school. A $250,000 extension to the existing





STUDENTS (left to right) test electronics power, check signal computer, and operate missile system control console.

Good Guided Missile School

facilities is now underway. It is scheduled for completion in early 1965, and will train students in the latest *Terrier* fire control systems.

A MAJOR FEATURE of the improvement of facilities will be a classroom-laboratory combination. Through the use of folding doors an area can be used separately as a classroom and laboratory or as a combined classroom-laboratory. This permits a great deal of flexibility under varying training loads.

Prospective commanding officers and executive officers of both *Polaris* submarines and surface missile ships, as well as surface missile ship officers, missile fire-control officers, and *Polaris* weapons officers and navigators, attend the Dam Neck school.

Senior officers attend a special three-day orientation course in the *Polaris* missile.

Altogether, if one man were to attend all the courses—with no repetition—it would take him about 11 years to complete his studies.

AN ACTIVITY that's growing in numbers (of students) must grow in facilities (to take care of them).

This is what is happening, but even so the speed-up in the *Polaris* program has brought some growing pains with it. Depite corner-and-red-tape-cutting at all levels, the student load has grown faster than new facilities.

Originally housed in temporary World War II buildings, the Guided Missiles School moved into a modern new building in 1958. Further expansion demanded a second building in 1960—the Guided Missile Annex, and in 1961 it became necessary to use a building belonging to the Fleet Anti-Air Warfare Training Center. As the Fleet's demand for Guided Missiles School graduates continued to increase, the school was finally forced to reoccupy the old temporary buildings once again.

Currently nearing completion is a new *Polaris* training building, the only one of its kind in the world. Named in honor of Vice Admiral W. F. Raborn, who headed the *Polaris* program as Director of Special Projects, it was scheduled to be ready this year, and is receiving the finishing touches at the present time.

THE POLARIS Training Facility at Dam Neck, Virginia Beach, Va., is where future FBM technicians will learn trade.







GRADUATES from FBM phase of Guided Missile School fill billets in *Polaris* launching subs like one shown above.

During the building period, there has been a shortage of everything—that is, everything but students. Classrooms, barracks space and laboratories were insufficient, but the students kept coming. As a result, the school has been operating in two and, at times, three shifts. The student load has stayed so consistently ahead of facilities that current plans call for two-shift operations as far as can be foreseen in the future.

WITH TWO CREWS required for each *Polaris* submarine, a great deal of equipment is necessary.

Wherever possible, tactical equipment—the same as that installed in the submarine—is used. Only those items peculiar to a submerged submarine which cannot be physically duplicated are handled by other than tactical equipment. These include such factors as movement, rolls, pitch and movement of water over the submarine. For these items, simulators or stimulators are used to make the equipment "think" as though it were underway.

An actual *Polaris* launch tube stands in the rear of the main Guided Missiles School building. Formerly used at Mare Island Naval Shipyard for *Polaris* test firings, the tube was dismantled and shipped to the Guided Missiles School, where it became operational for training purposes in 1960. It is used for training launch personnel.

It fires a four thousand-gallon slug of water.

Equipment requirements at the Dam Neck school are determined on the basis that 50 per cent of a course will be laboratory work. This lab work is necessary to train technicians in the maintenance and repair of complex equipment. In addition, only a few men—three or four at most—can profitably work on certain pieces of equipment at one time.

High costs make it necessary to use the equipment to the maximum to reduce total requirements; thus it's necessary to plan for two-shift usage for long-range requirements. Three-shift usage is not feasible because, even in a repair and maintenance school, equipment must be kept working. At Dam Neck the third shift is allocated for routine maintenance on the school's equipment.

IN POLARIS TRAINING at Dam Neck, each crew of the SSBN 598-608 class submarines requires about 31.5 man years of training at the Guided Missiles School. This does not include instructor time or Class "A" school time. Technical advancements which go into the SSBN 616 and SSBN 627 classes will increase these training requirements to 35.5 man years.

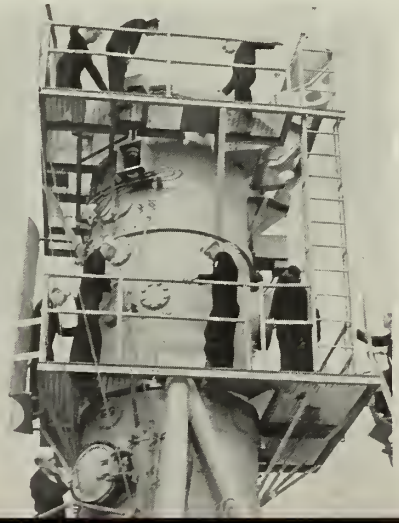
With the number of men taking Class "A" School training and surface-to-air training, added to those studying *Polaris*, the number of graduates last year was about 4000.

One of the many signs of success of the Guided Missiles School is its participation in the STAR Program. It recently won a commendation from the Bureau for the number of personnel reenlisting as STARS.

It is claimed that the Guided Missiles School's total STAR Reenlistments for fiscal 1963 are an all-Navy record. The regular reenlistment rate is an outstanding 98.3 per cent.

ON BOARD — Students are taught theory of electrodes. *(Right)* FBM trainees see *Polaris* launch tube.





INSIDE JOB — Students in MT 'A' School try hand at making repairs to electronics power supply unit.

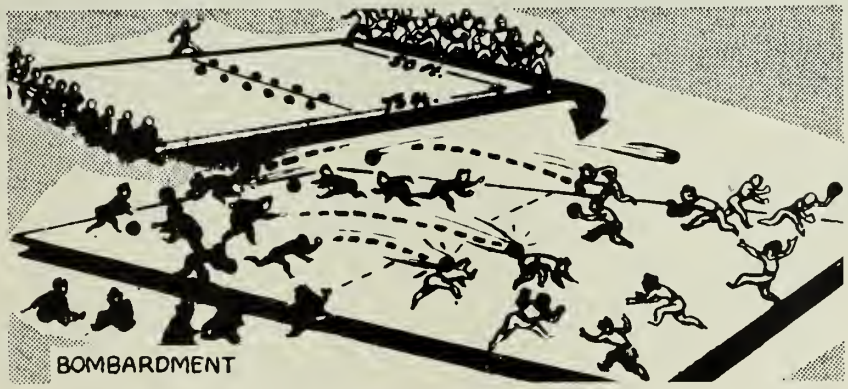


Guide for Vigorous Volunteers

TIRED OF PINOCHLE, cribbage and acey-ducey? Next time you feel the urge for a little recreation, why not round up the gang for a game of *Skirmish?* Or, if you prefer, try *bombardment, attack* or *long ball.*

Chances are you've never heard of these games, but they're all real. They are among many lesser known sporting activities listed in a new booklet published by the BuPers Special Services Division, titled *Guide For a Vigorous Voluntary Sports Program For Ship and Station.*

Don't let the title frighten you—it's not part of some scheme to force you out on the playing fields if you'd rather be in the hobby shop, on liberty or in the rack. It is a very useful booklet that provides many suggestions on how to work up some activity when things are dull. And it does much more.



BOMBARDMENT

The main problem faced by any group when trying to organize sporting activities is *how* to organize them. This booklet is a storehouse of indexed information on the subject, covering everything from how to make best use of available facilities and how to arrange schedules and conduct tournaments, to a breakdown of sports appealing to various age groups and how equipment should be sized and ordered. It lists official rules and reference books, describes the techniques of being host for a tournament, discusses sports leadership, and even tells how to publicize and promote the program.

An example of what the booklet offers is the illustrated section on "Types of Sports Events." Here we learn how the game of skirmish is played. This is a good game for spur-of-the-moment activity because any number of players can be fielded. A playing area 40 by 60 feet is recommended.

Two teams of equal strength stretch across opposite ends of the field, facing each other, about 40 feet apart. Each player has a hat or similar object, which he drops on a line drawn just behind where his team is lined up at the start of play.

The starting signal invites the ensuing melee. The object is for players on each team to guard their own hats and, at the same time, capture opponents' hats. One strategy is for each team to send some men to attack the opposing side while keeping some men back as home guards.

Depending on the rules decided upon, a player may be restricted to capturing only one hat at a time; or, to make it more interesting, no such restriction is imposed.

After a player captures an opponent's hat he tries to get it back to his end of the field before being tackled by an opponent. If he succeeds, he deposits the prize behind his line and renews his attack. If his flight is interrupted by a vengeful tackler, however, the hats must be returned to enemy territory and the player must return home before he can renew his attack.

One point is scored for every hat seized and taken home successfully (kept until the finish of play).

Bombardment, like skirmish, is slightly reminiscent of school-day games, but with enough twist to avoid puerility. Ten to 15 volleyballs are needed for 20 to 40 players, on a level area 50 by 75 feet with a center dividing line.

The balls are placed along the center line and the two teams withdraw to opposite ends of the field. On signal the teams converge. They race to grab up as many balls as possible, then begin bombarding each other. No member of either side may cross the center line.

Any man hit by a ball drops out, unless he catches the ball. He may then continue to play, hurling the ball back in an attempt to put an opponent out. The team having the most players in the game at the end of a pre-determined time wins.

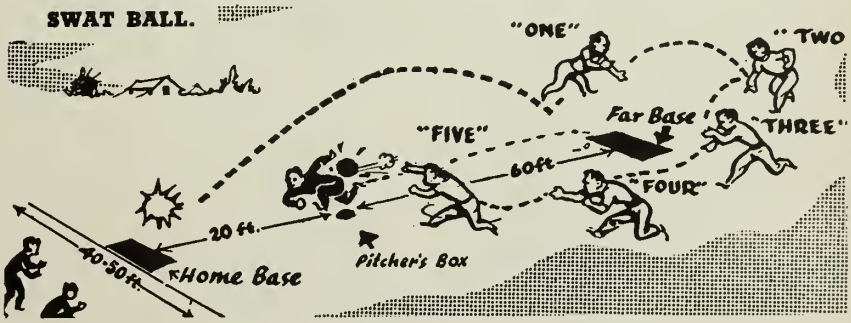
Attack is probably best described as field basketball, a game which can be played by 12 to 20 men.

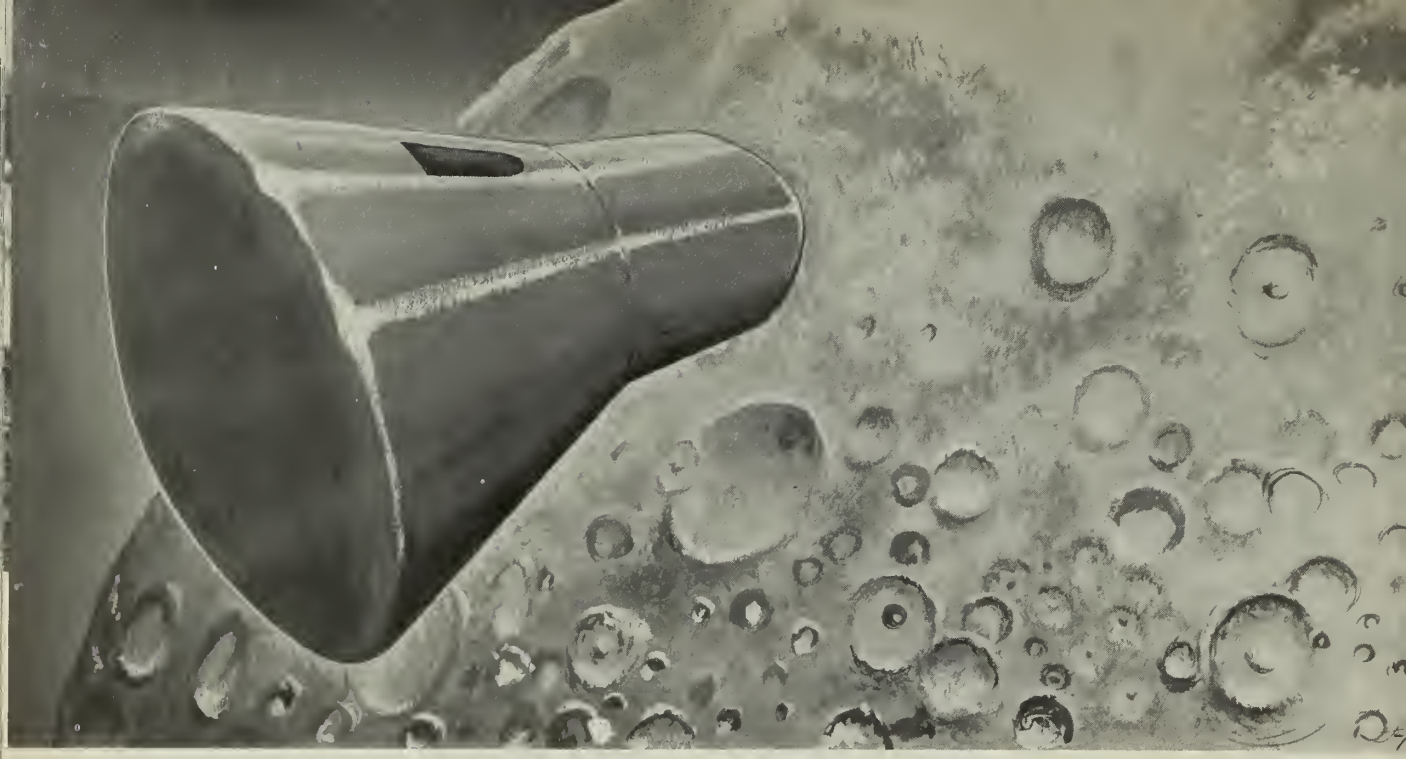
In addition to the above, the sports guide booklet includes instructions for playing swat ball, kick ball, Indian ball, four-man volleyball, paddle badminton, cage ball, line soccer, American ball, box basketball, tether ball, box hockey, push ball, bar wrestling and line rush.

The beauty of these games, many of them admittedly old standbys for school kids, is that they don't require a lot of special equipment, special playing areas or much organization, and there are games for almost any number of players. Many can be played aboard ship.

The main point is, the sports guide booklet can be an invaluable aid for the special services officer and the barracks group alike. It has been distributed to all commands (NavPers 15975).

As the saying goes, may the best team win. —Bill Howard, JO1, USN





ON THE WAY—What trip to moon may be like is being answered today in tests performed by Navymen and others.

Four Men in a Square



WHAT WILL HAPPEN during space travel to the moon and beyond is pretty well known by now (we think). Navymen and others have been tested for the effects of zero gravity and a multitude of other conditions unfamiliar to earthbound types.

In fact, Navymen have, even while more or less anchored to earth, been subjected to nearly every condition of space flight and lunar environment. Several points, however, remain to be cleared up.

How, for example, will men function outside the earth's magnetic field for extended periods of time?

TESTING — D. C. Albert, AN, from School of Aviation Medicine, takes a bath in 'confinement.' *(Below)* Reactions of volunteers are tested.



As one might suspect, finding a location on earth where the planet's magnetic field can be suspended for the required period is difficult. There are such places, however, and one of the best is at the Naval Ordnance Lab in White Oak, Md.

Except for the NOL building's isolation and the ample warnings to automobiles and lawn mowers to keep their distance, the building's exterior presents no unusual aspects.

Even inside, it takes a while to note the complete absence of any ferrous, hence magnetic, material.

AT ABOUT the center of the large room, on a small square of special tile, four men sat playing a rather apathetic game of cards. There were screens on two sides of the square and curtains on the other sides. These were for the sake of privacy rather than confinement.

Above the men, a magnetic coil was attached to a non-magnetic girder. The coil cancelled the earth's magnetic field within the square.

The Navymen in the square were enlisted men from the U. S. Naval School of Aviation Medicine at Pensacola, Fla. They had volunteered, upon leaving boot camp, to be professional guinea pigs. They wanted to be a part of the space age, and this was one way of accomplishing it.

The men wore sneakers with non-magnetic eyes for laces which had non-magnetic tips. Their faces were covered with stubble grown during their confinement, because shaving with metal razors was taboo.

The men sat on non-magnetic chairs at a wooden table held together with non-magnetic screws. On one of the screens there was a calendar marked with Xs and a large red circle indicating the day of the men's release.



As one monotonous day followed another, the men amused themselves by reading and playing cards. They got on each other's nerves surprisingly little.

Two of them—Airmen Ronald and Dwight Thompson, were brothers. The other two, Airman Apprentice Richard Overall and Airman Daryl Albert, had only recently finished working with the Thompson brothers in an experiment on motion sickness—during which they were tossed around like corks in a small ship for several days in an angry North Atlantic.

The men in the square kept themselves fit by doing deep knee bends; walking up and down a two-step stair and running in place.

They bathed in plastic garbage cans which were brought into the square when the occasion demanded. At night, non-magnetic double-decker bunks were moved into the square and they slept.

Periodically, the men's responses were tested to see whether or not zero magnetism was affecting their ability to perform tasks requiring the use of their muscles, senses and reflexes. Their state of health was also under constant observation.

A team from the University of Indiana's Neuropsychology Laboratory checked the men's neuropsychological responses after the coil was turned off.

The entire experiment was carefully controlled and the information gathered during the 24 days will be studied closely. When the conclusions are reached, they will undoubtedly make man more certain of his footing when he takes his first step on the moon. —Robert Neil.

BIG DEAL—Navy volunteers play cards during 24-day experiment of living outside the earth's magnetic field.















FIRST 'E' INCREMENT

Here They Are: The

RESULTS of the Battle Efficiency competition are published about this time each year, and thousands of whitehats sew the "E" on their uniforms. Signalmen break the meatball pennant. And the E—or a hashmark under last year's award—is painted on ship's bridge or aircraft tails.

Competition for the E is conducted by type commanders, and ships are judged on their fighting ability as compared to other ships of their

Naval Air Force, Atlantic Fleet:
- *Enterprise* (CVAN 65)
- *Intrepid* (CVS 11)

Mine Force, Atlantic Fleet:
- *Meadowlark* (MSC 196)
- *Adroit* (MSO 509)
- *Observer* (MSO 461)
- *Pandemus* (ARL 18)
- *Valor* (MSO 472)
- *Exultant* (MSO 441)
- *Aggressive* (MSO 422)
- *Skill* (MSO 471)
- *Salute* (MSO 470)
- *Orleans Parish* (MCS 6)
- *Nahant* (AN 83)
- MSB 11
- MSB 43
- MSB 29

Cruiser Destroyer Force, Atlantic:
- *Northampton* (CC 1)
- *Rich* (DD 820)
- *R. H. McCard* (DD 822)
- *Semmes* (DDG 18)
- *Luce* (DLG 7)
- *F. T. Berry* (DD 858)
- *Compton* (DD 705)
- *R. K. Huntington* (DD 781)
- *C. R. Ware* (DD 865)
- *Lawrence* (DDG 4)
- *Gearing* (DD 710)
- *DuPont* (DD 941)
- *Warrington* (DD 843)
- *Conyngham* (DDG 17)
- *Beale* (DD 471)
- *Lowry* (DD 770)
- *Laffey* (DD 724)
- *Cromwell* (DE 1014)
- *Kretchmer* (DER 329)
- *J. R. Perry* (DE 1034)
- *Bainbridge* (DLGN 25)
- *Arcadia* (AD 23)
- *Cascade* (AD 16)
- *Greenwich Bay* (AVP 41)

Amphibious Force, Atlantic:
- *Mountrail* (APA 213)
- *Talbot County* (LST 1153)
- *Sandoval* (APA 194)
- *Rockbridge* (APA 228)
- *Donner* (LSD 20)
- *Hermitage* (LSD 34)
- *LCU* 1610
- *Krishna* (ARL 38)

Service Force, Pacific:
- *Pyro* (AE 24)
- *Pollux* (AKS 4)







Elite of the Fleet!

type. It's usually a pretty rough contest and the E is a sure sign of excellency.

This year well over 100 ships are flying the meatball. The list below is a partial one. Later winners will be listed as the results come in. If your unit won the Battle Efficiency E, but is not included, write: Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D. C. 20370

Chemung (AO 30)
Chipola (AO 63)
Mahopac (ATA 196)
Klondike (AR 22)
Grasp (ARS 24)
Cree (ATF 84)
Arikara (ATF 98)
Serrano (AGS 24)

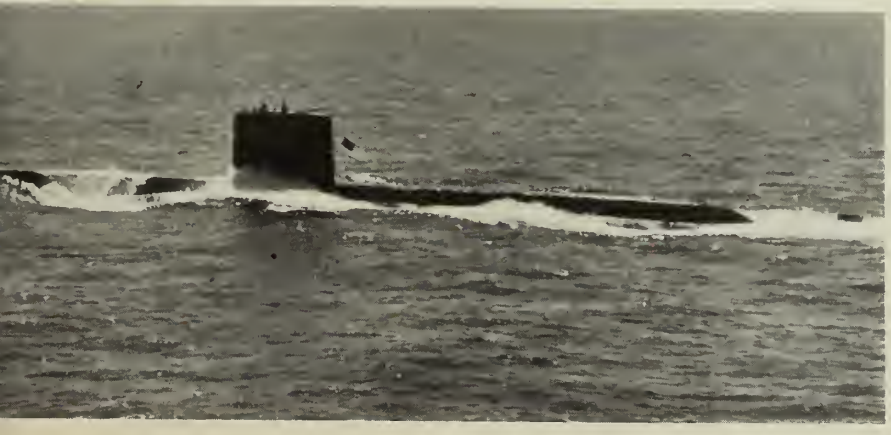
Amphibious Force, Pacific:
Valley Forge (LPH 8)
Summit County (LST 1146)
Kemper County (LST 854)
Vernon County (LST 1161)

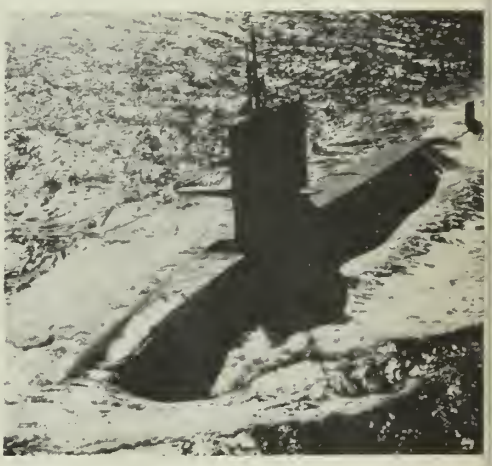
Service Force, Atlantic:
Mauna Loa (AE 8)
Rigel (AF 58)
Altair (AKS 32)
Salamonie (AO 26)
Waccamaw (AO 109)
Truckee (AO 147)
Mattabesset (AOG 52)
Cadmus (AR 14)
Windlass (ARSD 4)
Paiute (ATF 159)
Utina (ATF 163)
Somersworth (PCER 849)
Neptune (ARC 2)
San Pablo (AGS 30)
Edisto (AGB 2)
MCB 4

Mine Force, Pacific:
Engage (MSO 433)
Persistent (MSO 491)
Whippoorwill (MSC 207)
MSL 20
MSL 26

Submarine Force, Atlantic:
Halibut (SSGN 587)
Cusk (SS 348)
Barbel (SS 580)
Permit (SSN 594)
Sea Fox (SS 402)
Capitaine (AGSS 336)
Salmon (SS 573)—Seventh consecutive award
Scamp (SSN 588)
Swordfish (SSN 579)
Blackfin (SS 322)
Wahoo (SS 565)
Chanticleer (ASR 7)

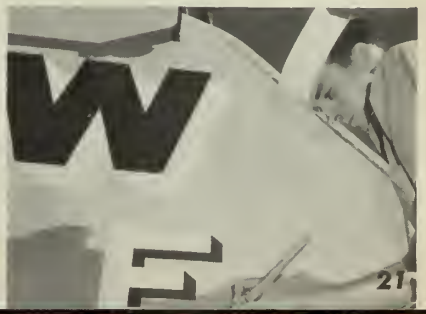
Naval Air Force, Pacific:
Kitty Hawk (CVA 63)
Yorktown (CVS 10)
Air Antisubmarine Squadron 33















A River

A DAY in the life of the Vietnamese Navy's 21st River Assault Group in My Tho shows even the most casual observer that the unit has developed into a high *esprit de corps* fighting force.

As the day begins for Lieutenant Robert M. Ballinger, USN, MACV's U. S. Navy Advisor to the 21st RAG, he attends a conference with his counterpart, Vietnamese Navy Lieutenant Nguyen Van An. The gist of the conference is always: "Where do we patrol today?"

After carefully laying out their patrol plans they get underway, usually patrolling from shortly after noon until almost midnight. Many times they make contact with the communist insurgents but sometimes they do not.

On a particularly mild day in June, more suited to beach lounging, LT. An announced intentions to patrol a river in the Mekong Delta.

His men hurried to get their craft ready for the patrol. They had just returned from a three-day operation that netted 23 VC killed and were hungry for another victory.

However, the only contact made during the day was with three in-





Assault Group in Vietnam

surgents in a sampan. The four STCANS (French gunboats dating back to the days of the Indo-China war) opened up with their 50 cal. machineguns but the range was too great for accurate shooting and the guerrillas quickly put in to the shore and lost themselves in a mangrove swamp.

The patrol proceeded until the mouth of the Go Cong river was reached and a VC blockade in a canal was found. Suspecting that the blockade was mined, LT. An decided to return to My Tho.

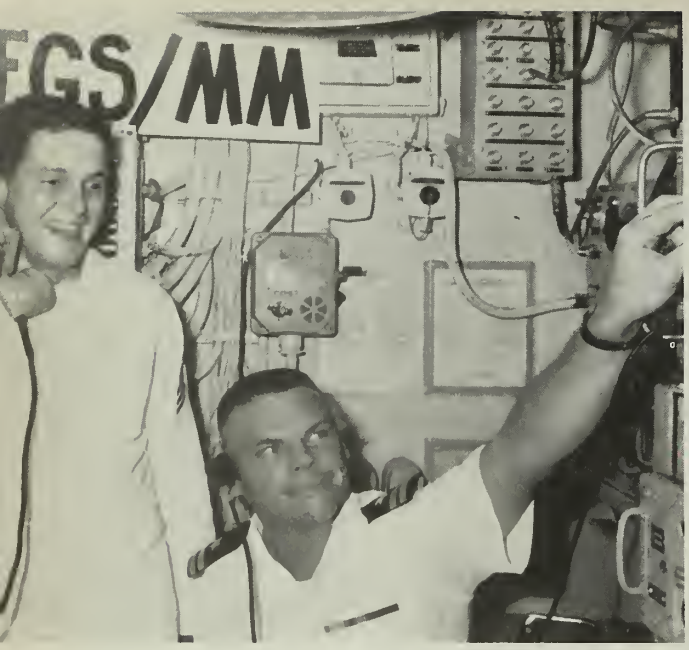
While traveling back under the cover of darkness the *Commandament*, a river patrol boat, which carried LTs. An and Ballinger and their guest for the day, Robert K. Reilly, came under sniper fire from the shore. The gunfire was returned and the group proceeded home.

John E. Jones, JO3, USN

Photo Captions

Clockwise from Upper Left: (1) Slicing through the water as night falls, the STCANS from the 21st River Assault Group continues to patrol, always searching for insurgents. This patrol did not return until long after dark. (2) Lookout and radio operator from the Vietnamese assault river group keep a sharp eye for Viet Cong snipers that might be lurking along the shore. Radio operator stands ready to relay any information to other boats of the patrol. (3) Patrol boat closes in on Viet Cong troops in a sampan hidden by the waterspout caused by 50-caliber machinegun fire. (4) LT Robert K. Reilly and LT Robert M. Ballinger, U.S. Navy advisors to the Vietnam 21st River Assault Group, often live in native surroundings, eating local food in the local manner. (5) This Viet Cong mud bunker and thatched roof lookout post was destroyed by patrol from the 21st River Assault Group of the Vietnamese Navy. A 20mm gun and grenades were used to do the job.







HELLO HOME—Crewman calls home via *Wilhoite's* ham radio. *Rt:* R. L. Mattingly, OM2, makes and plays guitars.

Sailors Build Mountain of

NAVYMEN, like many other solid citizens, like to spend some of their free time enjoying their pet avocations. Those stationed at sizable shore facilities frequently have a hobby shop available, equipped with the wherewithal for anything from baking a ceramic coffee mug to rebuilding an automobile engine.

Everyone knows the sailor who bought an old clunker, took it to the hobby shop and came out with a dependable automobile.

Navymen who begin with something better than a beat-up heap find they can save money by using hobby shop facilities to tune their motors, change points and do the many other maintenance jobs which a smoothly running car requires.

Those interested in building or repairing their own TV sets or yearning to improve the sound coming from their stereophonic tweeters and woofers can use the electronic repair shop, which usually comes complete with other workmen always willing to kibitz and even lend an assist with whatever project is underway.

Ceramics shops come complete with firing kilns and the makings for ash trays, coffee mugs and what have you. Ceramics equipment can, of course, be managed at home but not without considerable cost in both money and space.

Most hobby shops sport carpenter and welding shops where hifi cabinets take shape and the crossbar on Junior's bike can be welded. This is not to mention model-building facilities and resale shops.

BUT HOBBIES aren't confined to the precincts of the hobby shop. Navymen have long been exercising their creative talents in their spare

OFF DUTY—R. O'Hagen, SF3, finishes painting aboard *USS Independence*. *Rt:* Wood shop is popular with Navymen.









MUSCIAN Scimonelli, MUCM, took up post horn as sideline. *Rt:* Motorcycle is worked on in Pt. Mugu hobby center.

Talent in Off Hours

time, often with notable and profitable results. There was, for instance, the whittler whose skills increased to the point at which he acquired the more dignified title of woodcarver.

His carvings have been exhibited to win blue ribbons, and some of his products sell for as high as a hundred dollars.

Painting seems to be a favorite of many Navymen, and frequently their proficiency benefits the bulkheads of their ships in the form of murals or framed canvases.

USS *Columbus* (CG 12), for instance, was painted in oil by Thomas Zamora, SD2, and hung on board. Zamora had previously done a painting for the U. S. Naval Hospital at Bremerton, where he was once a patient.

The eating spaces in USS *Ranger* (CVA 61) have been enlivened by murals by Brian F. Tucker, an airman on board *Ranger* in 1963.

Earlier in his naval career Tucker also painted six-by-fifteen foot murals behind the mess hall serving line at Miramar.

The crew's dining area in USS *Forrestal* (CVA 59) sports a likeness of the big carrier on what had been a conspicuously blank space. The painting—courtesy of Airman Apprentice Harry M. Allen.

SOME NAVYMEN'S avocations directly or indirectly benefit the service, besides providing recreation. Aero clubs for example; here Navymen who are members can learn to fly at a fraction of the price charged by commercial facilities.

There are also the numerous Navy ham radio operators who are part of a network that can, and does, function in emergencies and provides a link with the folks back home for men having isolated duty.

There are musicians aplenty in the Navy, but some of them develop musical tastes for the exotic or unusual. Steve R. Riccitti, HM3, for instance, developed a skill in playing the Japanese samisen, a banjo-like



COLLECTORS—Phil Clover, CT1, displays part of shell collection. *Below:* Chess champ, H. Lemkey, QMC, 'collects' from two opponents simultaneously.







HOBBY TIME—R. E. Clark, SN, of *USS Maury* looks over his mosaic. *Rt.* M. R. Howlett, ADC, exhibits money collection.

instrument with three strings.

Although playing a musical instrument could hardly be classed as a hobby for Master Chief Musician Frank Scimonelli, his mastery of the English post horn transcends the bounds of conventionality.

The post horn is a long pipe-like brass instrument which was used in more leisurely days to inform villagers of the arrival of mail coaches.

Mozart and Haydn wrote music for the instrument, but Scimonelli coaxes sounds out of it that Mozart and Haydn probably didn't dream of.

The entire Scimonelli family, as a matter of fact, takes after Pop (but not on the post horn). Mrs. Schimonelli and the five children join Dad to make up a hot combo.

Stephen B. Lord, ATC, and his daughter have wowed the people of Tennessee with their renditions of Appalachian Mountain folk singing and have made several professional appearances. Day plays the guitar and daughter Valerie plays the auto-harp. Both sing.

THERE ARE, of course, the collectors. Capt. David Hottenstein, MC, USN, and his wife collect rocks which they cut and polish. The captain and his lady won a special award for their collection at the annual show of a gem and mineral society held recently in Jackson, Miss.

A chief warrant officer who was stationed in Japan collected sake bottles which, presumably, were empty at the time of purchase. No two specimens in his collection are the same size or shape.

One of the most practical collectors we know of is the numismatist, who according to Webster, is one who collects money. One Navy chief of whom we have heard carries his $4000 collection around in a large bank carrying case. The collection also includes $500 in Confederate money—just in case.

Another collection, of considerable interest to other collectors and scientists, is an aggregation of shells. The dictionary says a person who collects and studies mollusks and shells is a conchologist. The Navy has at least

Here's Just a Sampling of Suggestions o

A number of informative publications which will help Navy hobbyists increase their leisure-time skills are available through the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

There is a nominal charge for these publications which should accompany your order.

Here are some of the available titles, and the catalog numbers to be used in ordering them, together with the price of each and a brief description:

WOODWORKING

Wood Handbook $2.00 (Cat. No. A 1.76:72)—An aid to better and more efficient use of wood. Some of the topics covered are: structure and physical properties of wood, grades and sizes of lumber, gluing of wood, plywood and other crossbanded products, bent wood members and more.

Blueprint Reading and Sketching $1.00 (Cat. No. D 208.11:B 62/956)—Begins with a general discussion of a blueprint. Technical sketching is described and illustrated, and ways are suggested to produce correct and attractive sketches. Also has sections on wiring, schematic diagrams, welding, and architectural symbols.

Carpentry and Building Construction $.75 (Cat. No. D 101.11:5—460)—Contains details on various phases of carpentry and home construction.

Easy-to-Build Kitchen Cabinets $.15 (Cat. No. A 1.77:18)—Working drawings for building eight different cabinet units, each of which is designed for a specific need.

Sundials $.05 (Cat. No. C 13.4:402)—Tells you how to make one and gives a table by which you can equate sundial time to the time in your locality.

CAMPING AND BOATING

Recreational Boating Guide $.40 (Cat. No. T 47.8/3:B 63)—Designed to acquaint the boating public with the requirements of Federal boating laws.

Camp Stoves and Fireplaces $.50 (Cat. No. Y 3.Em 3:2C 15)—This is a useful booklet to homeowners as well as outdoorsmen. It is illustrated and gives details on construction.

Harbor Craft Crewman's Handbook $1.50 (Cat. No. D 101.11:55-501)—This book was written for professional use, but will be valuable to private owners of small boats.

National Watercraft Collection $3.50 (Cat. No. SI 3.3:219)—A comprehensive catalog of the ship and boat collection in the U. S.





AFTER HOURS—R. G. Edeen, EM1, shows wood carvings. *Rt:* R. C. Knudwon, OMSA, makes purchase at hobby shop.

one among only a few thousand in the world.

There are, of course, many hobbies in the Navy—the builders of all kinds of models; amateur actors; creators, from such oddments as hemp line, of whimsical and terrifying creatures; etcetera for a list (in small print) as long as your arm.

If the variety of hobbies to be found in the Navy proves anything at all, it may be that Navymen, despite the transient nature of their way of living, can nevertheless enjoy the inquisitive and acquisitive hobbies of the more sedentary segments of the population.

—Robert Neil.

'ays to Enjoy Leisure Time—Check Your Library for Others

National Museum, Smithsonian Institution.

RADIO

FM Transmitters and Receivers $1.50 (Cat. No. D 101.11:11-668)—Details on the operation and maintenance of FM radio transmitters and receivers. Methods of producing frequency modulation are set forth, and the basic circuit of FM transmitters, along with examples of complete and typical sending sets are included.

HORTICULTURE

Part-Time Farming $.10 (Cat. No. A 1.9:2178)—Whether and how a city feller should putter around on a small plot of farm land in the country.

Suburban and Farm Vegetable Gardens $.25 (Cat. No. A 1.77:9/2)—Simple instructions on how to prepare a garden and improve the soil.

Growing Annual Flowering Plants $.15 (Cat. No. A 1.9:1171-/4)—Tells how to have year-round beauty in your home and garden with instructions on planting and care.

ANIMALS

Raising Rabbits $.20 (Cat. No. A 1.9:2131) This pamphlet delves into all aspects of rabbit raising with emphasis on the commercial (rabbits for food and fur).

Hamster Raising $.05 (Cat. No. A 1.35:250)—If you want them for pets, OK. If you want to raise them for profit, laboratories buy them. This tells you how to do it.

WRITING

U. S. Government Printing Office Style Manual (Abridged Edition) $1.25 (Cat. No. GP 1.2:St 9/18/959/Abridged Ed.)—Probably no two publications use exactly the same style but this is an excellent general guide to punctuation, spelling, abbreviations, compounding, capitalization and other information which writers and editors find useful.

Effective Revenue Writing 1 $1.00 (Cat. No. T22.19/2:W 93/no. 1)—This covers points which are frequent stumbling blocks in grammar and gives a writer's guide to current usage of some words and phrases.

Effective Revenue Writing 2 $.70 (Cat. No. T 22.19/2:W 93/no. 2)—An advanced course designed to help experienced writers and reviewers diagnose and cure writing weaknesses.

AUTOMOBILES

Principles of Automotive Vehicles $3.25 (Cat. No. D 101.11:9-8000)—A convenient reference source on automotive repair for both the amateur and professional.

COLLECTING

Postage Stamps of the United States 1847-1961 $1.25 (Cat. No. P 4.10:961)—This provides a 232-page comprehensive review of all United States postage stamps from the first adhesive stamp issued in 1847 through the Nursing Commemorative Stamp issued in 1961.

Domestic Coins Manufactured By Mints of the United States $.25 (Cat. No. T 28.1a:C 666/2/961)—This pamphlet provides a story of gold, silver and minor U. S. coinage through the year 1961.

Collection and Preservation of Insects $.25 (Cat. No. A 1.38:601)—Practical information on collecting, preserving, handling, mounting and labeling insect specimens.

PHOTOGRAPHY

Basic Photography $2.00 (Cat. No. D 301.7:95-1/2)—The theory, practice and techniques of photography.

MISCELLANEOUS

Patents and Inventions, An Information Aid for Inventors $.15 (Cat. No. C 21.2:P 27/10)—Gives just what the name implies by providing answers to questions frequently asked about patents.

Guide for Patent Draftsmen $.15 (Cat. No. C 21.14:D78/961)—Shows you how to prepare a plan of your invention for a patent.

SERVICESCOPE

Brief news items about other branches of the armed services.



INTER-SERVICE cooperation prevailed when this Air Force helo brought Army men to Florida to pick up equipment.

THE ARMY IS GOING to sea. *Albermarle* (AV 5), formerly in the Navy's Reserve Fleet, is being converted to an Army mobile aircraft maintenance base.

Ship's company will include about 380 soldiers, but they'll be mostly in the business of repairing aircraft. The sailoring will be done by some 135 officers and enlisted men in the Military Sea Transportation Service.

The seagoing shop will perform major repairs on Army aircraft, both helo and fixed wing, wherever needed. It will serve both independently and as a back-up facility for overloaded land-based facilities overseas.

Under the present overseas Army maintenance system, many aircraft parts must be ferried back to the states for repairs. The seaplane tender, which will be equipped to repair the planes on the spot, can save much of the time and money lost in transportation.



KING SIZE—World's first 156-inch-diameter solid propellant rocket, being built for USAF, passes static test.

EVER WONDER HOW spacemen will get a closer look at objects they might find floating around up there? They might use something like an RMU for this job.

An experimental device—the initials stand for Remote Maneuvering Unit—it is designed to be launched from a manned, orbiting spacecraft to examine with television cameras objects in space.

The RMU is essentially a radio controlled detective. It is designed to be carried aloft aboard a space vehicle for use by the crew.

If something is seen floating near the spacecraft, the RMU can be dispatched to investigate. Its propulsion unit, which ejects hydrogen peroxide through gas nozzles, will allow the RMU to circle the foreign space object, taking television pictures and relaying them back to the mother craft. The RMU's movements will be controlled by the spacemen, by radio control.

When its mission is completed, the RMU will be brought back to the mother craft and readied for another scouting chore.

Developed for the Air Force, it is a compact package which weighs about 125 pounds. It is anticipated that the RMU will have useful scientific applications at present. Tests are scheduled from a specially equipped aircraft, and later in space.

★ ★ ★

ABOUT 5000 FULL-TIME language students were graduated from the Defense Language Institute during its first year of operation. For the coming year, DLI expects a total enrollment of 6500.

The Institute is a Department of the Army command and is responsible for all language training conducted in the military departments except that given at the service academies and for academic credit at civilian institutions. It is now in the process of standardizing texts and audio-visual techniques for more uniform training methods.

Language training for the U.S. Armed Forces includes four main categories: full-time foreign language training at the West Coast and East Coast branches; contract universities and commercial schools; required part-time instruction; and voluntary off-duty study. DLI also supervises English language training for foreign personnel at Lackland Air Force Base, Texas.

★ ★ ★

THE AIR FORCE might modify its F-104 *Starfighters* to make them more maneuverable because experiments and a four-month study have revealed how this could be accomplished.

Test pilots evaluated the performance of an F-104 which had a pair of strakes mounted aft and beneath the trailing edge of the fighter's wings, and reported that additional maneuvering capability was achieved in all regions of flight with no bad effects.

The recommendation to modify the planes is under consideration.

★ ★ ★

AN ARMY VERSION of a vertical take-off, lift-fan jet aircraft, the XV-5A, has successfully completed its first hovering tests. While being put through its paces at Edwards AFB in California, the aircraft rose vertically and hovered without difficulty.

The V/STOL (Vertical/Short Take-off and Landing)

plane had already performed successfully during conventional take-off and landing

The XV-5A takes off vertically, makes the transition to conventional horizontal flight, hovers, and descends straight down but slowly—for a landing.

During conventional flight the aircraft uses two J85 jet engines in the normal manner. But, while it's hovering, the jet exhaust is channeled through three ducts on the underside of the aircraft—one in each wing and one in the nose. This jet blast powers three fans, one in each duct, which give the plane lift for vertical movement and hovering.

★ ★ ★

ALASKA'S ARCTIC REGION is beckoning Air Force cold weather survival researchers to come out of their man-made refrigerators and perform their tests in a natural environment, and they are accepting the invitation.

It is difficult to simulate arctic conditions in a researcher's cold chamber for prolonged periods. A combination of natural stresses brought about by high altitude, reduced oxygen, constant cold, dry air and darkness must be reproduced and maintained.

So the Air Force is establishing an outpost on a plateau at the 13,800-foot level on Alaska's dormant volcano, Mt. Wrangell. A testing facility, including a prefabricated building, has been airlifted to the area. This will be used as a combination laboratory and living quarters for men who will begin testing new types of arctic clothing and equipment on location later this year.

Research on the physiological effects of cold weather stress on man will also be conducted. Scientists will investigate what happens to body fluids, enzymes and hormones; how much food a man needs; how much energy he expends; how well he withstands infection and disease; and the importance of physical fitness, while in Arctic environment for long periods.

★ ★ ★

KEEPING TABS on the satellites and associated debris orbiting the earth is becoming something of a problem, according to the North American Air Defense Command. There are at present about 400 objects in orbit, and this number is expected to reach 10,000 by 1975.



ON TARGET—Army gunner fires *Redeye* air defense missile. At safe distance from launcher it uses own power.

Authorities claim, however, that congestion will not become a serious traffic hazard to space travelers. The number of satellites is extremely small compared to the available area.

But the orbiting hardware is of great importance at NORAD tracking stations, where men watch the skies for signs of attack by missiles. Because an oncoming ICBM could easily be mistaken for a satellite—or vice versa—all orbiting objects must be carefully charted.

The charting operation requires approximately 6000 observations each day. Information gained in this manner is fed into computers, and the objects are charted.

Of the 400 orbiting objects, about 200 are U.S. satellites. Approximately 62 are Russian, two are British, and one is Canadian. The remainder are associated junk consisting of rocket parts which orbited along with the satellites.





ROCKET TESTER—New Air Force J-4 rocket test cell *Right:* rises nearly 50 feet above ground at Tullahoma, Tenn. *(left)* Looking up into cell's 250-ft. underground exhaust chamber. Cell can test rockets up to 500,000 pounds thrust.

Pointers on Four Programs

THE NAVY'S promotion ladder offers a pathway to officer country for qualified active duty enlisted personnel. On the first rungs of the ladder we find four programs which do not include or generally require a college education:

- A reinstituted Warrant Officer Program, with plenty of opportunities;
- A revised Limited Duty Officer Program, which is going to sit for a while to give prospective candidates a chance to catch up with its new requirements;
- The Integration Program, which will again select a few applicants from the Navy's pool of enlisted talent and dispatch them on careers as unrestricted line officers; and
- The Medical Service Corps Program, for HMs and DTs.

While applications for the two most widely applicable programs should already be in the early stages of processing for this year's candidates, the details of these programs are of special interest at this time because of changes made recently. This information is directed to both potential applicants and to division and I & E officers, who should be familiar with all programs leading to officer status and be alert to recognize and counsel individuals who possess officer potential.

One note for all applicants: Competition in the various programs is very keen, and requires preparation early in your career. You increase your chances for success by your efforts to increase your technical knowledge, through on-the-job training, specialized schools and correspondence courses.

In addition, if you're seeking appointment under the programs outlined here you should become familiar with the laws and regulations governing officer appointment, retirement and career matters, as contained in the *Officer Fact Book*, NavPers 15898.

Many applicants who have repeatedly applied for these programs have not completed a Navy correspondence or USAFI course, nor taken any steps to prepare themselves for the examination. This indicates little real motivation.

For those prepared to go for broke this year, and for those looking toward the future, here's a rundown on some special opportunities available:

- ***The Integration Program***—Offers the opportunity for appointment to commissioned status to outstanding young enlisted men and women. Those selected attend Officer Candidate School and are commissioned as ensigns in the line or Staff Corps of the Regular Navy. Membership in this program is restricted to a small, select group. Selectees compete throughout their careers with Regular Navy officers from all sources. Men selected for line appointments (1100) work toward command at sea, and can expect to perform general line duties afloat which will afford them the well-rounded professional back-ground needed to attain this. They will not continue to perform duties within the limited fields of their former ratings.
- ***The Warrant Officer Program***—Recently reinstituted and revitalized, provides senior petty officers with a path to officer status within their areas of specialization. Warrant specialists primarily work in close supervision over machinery and weapons and the enlisted personnel maintaining them, in effect bridging the gap between the enlisted man and the commissioned officer. They remain within their specialization categories, and do not perform many generalized collateral duties.

There are two warrant officer programs: the Warrant Officer (Temporary) and the Warrant Officer (Permanent). All men are initially appointed to Warrant Officer, W-1 (Temporary), while women selected are appointed to Warrant Officer, W-1 (Permanent). Men may apply for permanent appointment after three years service as WO (Temporary).

- ***The Limited Duty Officer Program***—Officers serving as Limited Duty Officers continue to perform as commissioned officers in the general area

Review Study Materials For Prospective Officers

Navy Texts

The United States Navy—Guardian of Our Country (OpNav Inst. 5720.17)
Naval Orientation (NavPers 16138C)

Navy Correspondence Courses

Naval Orientation (NavPers 10900)

USAFI Courses

American History I & II—*The Making of Modern America*
World History I & II—*Man's Story*
World Geography I & II—*The Wide World*
Economics I—*Economics: An Introductory Analysis; Readings in Economics*
Understanding American Government I—*Our American Government; The President of the United States*
American Government I & II—*Government by the People; Outside Readings in American Government*
Biology I & II—*Modern Biology*
Physics I & II—*Modern Physics*
Survey of Physical Science I & II—*Fundamentals of Physical Science*
General Science I & II—*Science For Progress*
General Chemistry I & II—*Chemistry And You*
Advanced Composition I—*Guide to Modern English*
General Mathematics I & II—*Mathematics To Use*
Beginning Algebra I & II—*Algebra, Its Big Ideas and Basic Skills*, Book I
Plane Geometry I & II—*Plane Geometry*
Trigonometry—*Trigonometry*

That Lead to a Commission

of their former warrant specialty or enlisted rating. Due to a revision of this program, there will be no input into the Limited Duty Officer Program after Fiscal Year 1965 until Fiscal Year 1969. When the selection process is resumed, LDOs will be appointed from the ranks of commissioned warrant officers in grades W-2 or W-3 who receive their original appointment after calendar year 1964. Detailed information concerning selection and appointment to LDO will be published at a later date.

• ***The Medical Service Corps Program***—This is a continuing program, with requirements varying within the various categories of the MSC, providing a path for advancement to officer status for qualified HMs and DTs. BuPers Inst. 1120.15 series gives the details.

There is no path to Medical Service or Dental Service warrant ranks. HMs and DTs who want to be considered for the Warrant Officer Program may apply in any area, other than medical and dental, in which they consider themselves qualified. They should remember, however, that they must compete for selection with others who have had many years of practical experience within that technical field. HMs and DTs are encouraged to participate in the MSC Program under the provisions of the above instruction.

The Warrant Officer Program now generally provides the greatest opportunities for active duty enlisted personnel seeking appointment to officer grades. A feature to be considered: some candidates are eligible for application to both the Warrant Officer and Integration Programs simultaneously. An applicant to these programs must meet the following general eligibility requirements:

• Be a U. S. citizen.

• Be physically qualified in accordance with standards contained in the *Manual of the Medical Department.*

• Have no record of conviction by general, special or summary court-martial, nor conviction by civil court for any offense other than minor traffic violations, for the two-year period preceding 1 July of the calendar year in which application is made.

• Women must meet the dependency requirements as set forth in *BuPers Manual,* Art. C-1102 (2).

• Applicants must not have applied in more than two officer designator codes in a given year.

From here eligibility requirements vary in the two programs. They are listed in the qualifications reported on the following pages.

Warrant Officer Program

Source: Enlisted members of the Regular Navy serving as petty officer first class and above. PO1s must have served for at least one year in pay grade on 1 July of the year in which application is made.

Age: Must be at least 23 years old but may not have reached 39th birthday as of 1 July of the calendar year in which application is made. (Note: It is expected that the maximum age requirement will be reduced to 29 after Fiscal Year 1969.)

Service: Must have completed six years but not more than 20 years of

(*Continued on page 35*)

Paths of Progression for Senior and Master CPOs

On the following pages are charts showing the paths of progression and occupational designations for chief petty officers at the E-7/E-8/E-9 paygrades. The charts also include revisions to categories and paths of progression for Warrant Officer and Limited Duty Officer categories as recommended by the Permanent Board for the Review of the Enlisted Rating Structure, and approved by the Secretary of the Navy. Here is a brief summary of their report:

• The paths of progression established for the Senior Chief and Master Chief Petty Officer paygrades are designed to reflect progressively higher levels and scopes of authority and responsibility. Where occupational content was found to be closely related, general ratings (61 at the E-7 level) were combined at the E-8 or E-9 levels to form broader occupational fields.

An example of this concept is the combination of the Senior Chief Instrumentman and the Senior Chief Opticalman to form the Master Chief Precision Instrumentman.

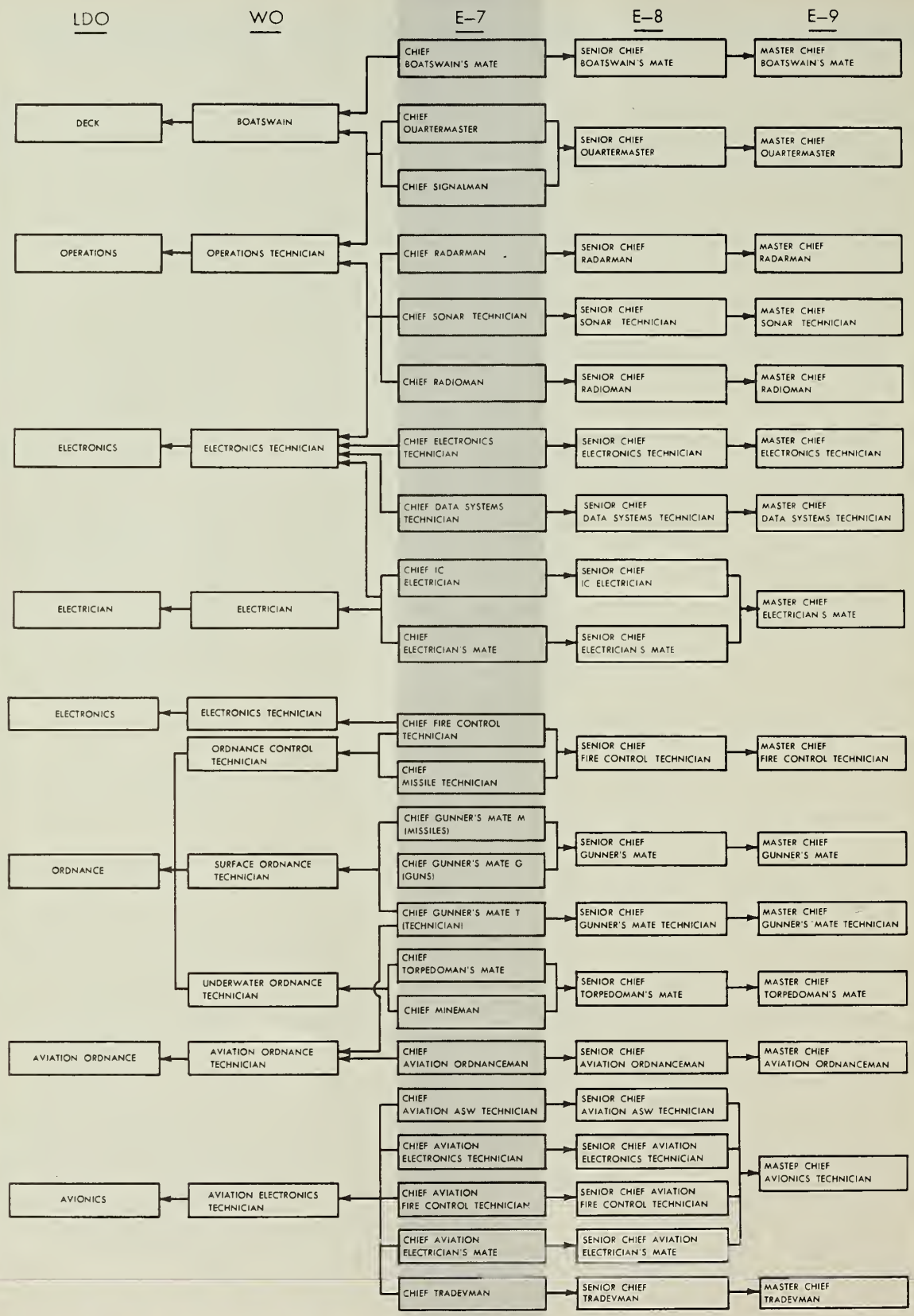
These rating combinations have resulted in fewer total number of general ratings at the E-8 level (60) and still fewer at the E-9 level (46).

This revised structure includes the following six new rating titles at paygrade E-9: (1) Master Chief Steam Propulsionman (SPCM), (2) Master Chief Aircraft Maintenanceman (AFCM), (3) Master Chief Avionics Technician (AVCM), (4) Master Chief Precision Instrumentman (PICM), (5) Master Chief Constructionman (CUCM), and (6) Master Chief Equipmentman (EQCM).

• The following Warrant Officer categories are being established: (1) Aviation Boatswain, (2) Aviation Control Technician, and (3) Air Intelligence Technician. Mine Warfare Technician is being absorbed by the Underwater Ordnance Technician and the Aviation Operations Technician is being replaced by Aviation Boatswain.

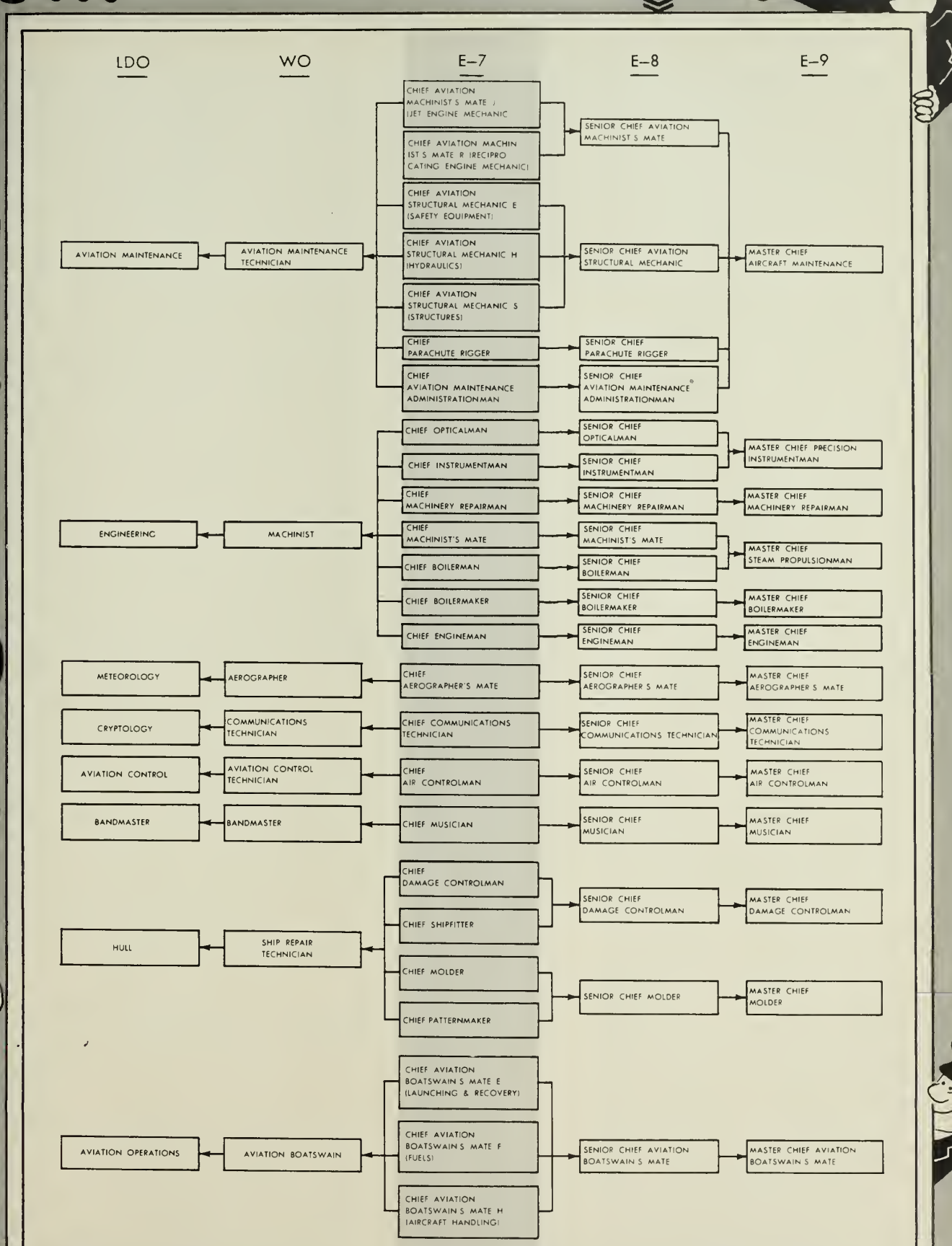
• The following new LDO categories are being established: (1) Aviation Control, (2) Air Intelligence, and (3) Ordnance. The latter category absorbed the Surface Ordnance, the Control Ordnance, and the Underwater Ordnance categories, which are being disestablished.

AT THE CROSSROA



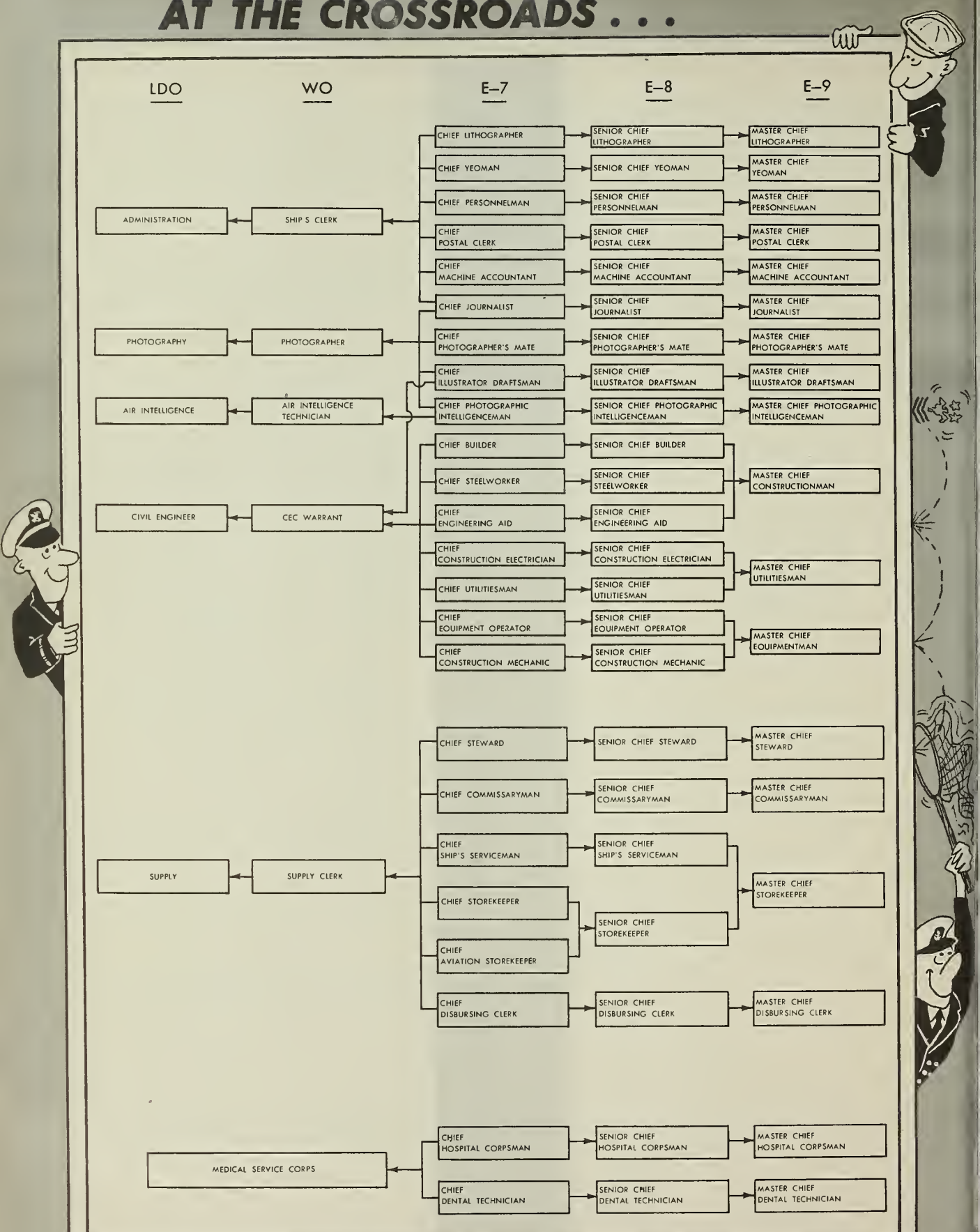
when you make chief today, many paths of op

...S...



...tunity are open -- here's a guide to your future

AT THE CROSSROADS . . .



when you make chief today, many paths of opportunity are open--here's a guide to your future

(*Continued from page* 31)

active naval service (including time in the Marine Corps and Coast Guard when operating as part of the Navy), exclusive of active duty for training in the Naval, Marine Corps or Coast Guard Reserve, on 1 July of the calendar year in which application is made. (Note: It is expected that the maximum service requirement will be reduced to 12 years after Fiscal Year 1969.)

Applicants must be serving in the Regular Navy on the date of written examination.

Education: Must be a high school graduate or possess the service-accepted equivalent of a high school education.

Must be recommended by the commanding officer.

All petty officers first class are required to have completed all practical factors, training courses, and performance tests for CPO and to pass the E-7 examination for the rating in which serving at the time of application for warrant officer. The E-7 exam will be administered in February following application, at the same time and with the annual Navy-wide E-7 exams.

Integration Program

Source: Enlisted personnel serving in pay grade E-4 and above in the Regular Navy.

Age: Men applicants must be at least 19 and under 25 years old as of 1 July of the calendar year in which application is made. Women applicants must be at least 20 and under 25. Requests for waivers up to 30 years of age will be considered for women when recommended by the commanding officer.

Service: All service computed for eligibility purposes must be continuous and in the Regular Navy, covering that period immediately preceding the submission of the application, computed to 1 July of the calendar year in which application is made. (Broken service in excess of 90 days is disqualifying and computation of Naval Reserve time is not authorized under the current provisions of law.)

Education: Applicants must meet one of the following requirements:

(1) Have successfully completed 30 semester hours of work at an accredited college or university, or have the service-accepted equivalent.

(2) Be a high school graduate (or the service-accepted equivalent) and have a GCT or ARI score of 60 or above. (High school transcripts are required with application.)

(3) Civil Engineer Corps applicants must have completed three years of college credits toward an engineering degree at an accredited engineering school.

Candidates must be recommended by the commanding officer and are not eligible if they have been con-

Normal Path of Advancement

ENLISTED RATING	WARRANT OFFICER CATEGORY AND DESIGNATOR	LDO CATEGORY AND OFFICER DESIGNATOR
SD, CS, SH, SK, AK, DK	Supply Clerk (798X)	Supply (370X)
DM* BU, SW, EA, CE, UT EO, CM, CUCM, EQCM	Civil Engineer Corps (849X)	Civil Engineer (570X)
BM, QM* SM*	Bootswoin (713X)	Deck (600X)
QM* SM* RD* ST* RM*	Operotions Technicion (714X)	Operotions (601X)
GMM, GMG, GMT* GM	Surfoce Ordnance Technician (723X)	
FT* MT	Ordnonce Control Technician (724X)	Ordnonce (615X)
TM, MN	Underwater Ordnonce Technician (733X)	
LI, YN, PN, PC, MA, JO*	Ship's Clerk (782X)	Administrotion (620X)
MU	Bandmoster (785X)	Bondmoster (626X)
OM, IM, MR, MM, BT, BR EN, PICM, STCM	Mochinist (743X)	Engineering (630X)
DC, SF, ML, PM	Ship Repoir Technicion (744X)	Hull (635X)
IC* EM*	Electricion (754X)	Electrician (637X)
RD* ST* RM* ET, DS, EM* IC* FT*	Electronics Technicion (766X)	Electronics (640X)
CT	**Communicotions Technicion (764X)	Cryptology (646X)
ABE, ABF, ABH, AB	Aviation Bootswoin (760X)	Aviation Operotions (660X)
JO* PH, DM* PT*	Photogropher (831X)	Photography (663X)
AG	Aerogropher (821X)	Meteorology (665X)
AO, GMT*	Aviotion Ordnonce Technician (721X)	Aviation Ordnonce (670X)
AX, AT, AQ, AE, TD AVCM	Aviotion Electronics Technicion (761X)	Avionics (680X)
ADJ, ADR, AME, AMH, AMS PR, AZ, AD, AM, AFCM	Aviation Maintenonce Technicion (741X)	Aviation Maintenonce (685X)
AC	Aviotion Control Technicion (745X)	Aviation Control (661X)
PT*	Air Intelligence Technicion (762X)	Air Intelligence (662X)

* Normol Path in more thon one cotegory
**Only CT rotings moy opply in these cotegories

sidered twice for the Integration Program.

All applications must be submitted in a standard manner, as outlined in BuPers Inst. 1120.18J, and other preliminary requirements for application outlined in the Instruction must be complied with.

Eligible applicants for the Integration and Warrant Officer Programs will be considered by the selection board convened by the Secretary of the Navy. The board will recommend those individuals considered best qualified within the authorized quota for appointment in the respective programs. An applicant requesting consideration under both programs will be given consideration under each one unless selected for appointment under his first or second choice. Selection automatically renders an applicant ineligible for consideration under the other program.

All applicants for these two programs are required to take the Officer Selection Battery of tests, consisting of eight parts: Verbal analogies, arithmetic reasoning, mechanical comprehension, naval knowledge, English, mathematics, science and history/social studies.

Indoctrination, Appointment and Assignment

Integration Program: Men applicants selected under this program will be ordered to the U. S. Naval Officer Candidate School, Newport, R. I., for 16 weeks of general line OC course. Women will attend OCS (W) for eight weeks and upon completion of the course, appointed in the Unrestricted Line or Staff Corps of the Regular Navy. After commissioning they will attend an additional eight weeks of training.

Naval examining boards will review the academic records of all who satisfactorily complete the training courses and determine if the applicants are mentally, morally and professionally qualified to perform as officers. Those selected will be appointed in the grade of ensign in the restricted line (1100), Supply Corps (3100) or Civil Engineer Corps (5100) in the Regular Navy, as appropriate.

Men selected for line commissions are initially assigned to large combatant, small combatant or large amphibious ships, or submarines (if qualified), or they may apply for flight training under the provisions of current instructions.

Supply Corps officers will be ordered to six months' training at the Navy Supply Corps School, Athens, Ga.

Civil Engineer Corps officers will normally be ordered to a civilian engineering school to complete their requirements for a bachelor's degree in engineering.

Women line officers may be expected to be ordered to an activity having an appropriate allowance.

Warrant Officer Program: Temporary appointments under this program are limited to line, Supply Corps and Civil Engineer Corps, for the performance of duty limited to technical fields generally indicated by the enlisted rating held. All applicants who are selected for appointment under this program will be ordered to the officer indoctrination course at Newport, R. I., or for aviation categories, at U. S. Naval Air Station, Pensacola, Fla.

All selectees are required to agree not to apply for voluntary retirement or reversion to enlisted rate before completion of three years' service as warrant officers.

After completion of the indoctrination course, warrant officers are ordered to ships or activities where they can best use their specialty. Former enlisted aviation pilots will be ordered to duty in DIFOT (duty involving flying or operational training) if still qualified.

Officers appointed in the Supply Corps will be ordered to six months' training at the Navy Supply Corps School, Athens, Ga., and officers appointed in the CEC will undergo two months' training at U. S. Naval School, CEC Officer, Port Hueneme, Calif.

For further details on any of the above programs, consult BuPers Inst. 1120.18J.

Note: On the following pages is a report of still another opportunity for qualified enlisted personnel to move up the ladder. Be sure to check on NESEP.

• **TARS IN REGULAR NAVY**—Many TAR billets are being transferred to the Regular Navy and the TARs, as well as other active duty Reservists, are being permitted to enlist in the Regular Navy.

In the future, the only TARs remaining on active duty will be those under the cognizance of the Chief of Naval Air Reserve Training and men in YN, PN, DK and SK billets under district commandants.

To be eligible for transfer into the Regular Navy, the man must be qualified in his rate and must have served on active duty in the Navy for the 12 months immediately before he enlists in the Regular Navy.

He must also be a citizen of the United States or an immigrant alien who can present proof of his declaration of intent to become a United States citizen.

He must not be over 40 and be able to complete 20 years of active duty before he is 51 years old.

Men who first enlisted in the Naval Reserve after 9 Aug 1955, and who are obligated for two years of active duty, may enlist only for six years in the U. S. Navy if they enlist before they have served 21 months on active duty.

Other Reservists can enlist in the Regular Navy for either four or six years. Personnel will be accepted in the Regular Navy at the same pay grade and rating held as when they were Reserves.

A TAR serving in a YN, PN, DK or SK rating under a district commandant can reenlist in the Naval Reserve or extend his Reserve enlistment and be retained as a TAR.

The TARs have a choice of enlisting in the Regular Navy after they complete their obligated service provided they are in one of the following open ratings: QM2, QM3, RD1, RD2, RD3, SM3, STC, ST1, ST2, ST3, TM3, MT2, MT3, FT1, FT2, FT3, GMT3, GMM3, ETC, ET1, ET2, ET3, DS1, DS2, DS3, RM1, RM2, RM3, CTC, CT1, CT2, CT3, MM2, MM3, BT2, BT3, BR1, EM2, EM3, IC2, IC3, AT3, AXC, AX1, AX2, AX3, AQ1, AQ2, AQ3, AC3, ABH1, ABH2, ABH3, AE3, AME2, AME3, PT2, PT3, AN, AA, AR, SN, SA, SR, FN, FA, FR, TN, TA, TR.

THE BULLETIN BOARD

NESEP Stands for One of the Greatest Opportunities of All

IF YOU'RE a petty officer (man or woman) on active duty, your chances for a Navy commission may be better than you think. Under NESEP—the Navy Enlisted Scientific Education Program—you may be able to qualify for an unrestricted line commission.

With an uninterrupted four-year education in designated colleges and universities, you can earn a baccalaureate degree in science, engineering or mathematics. Having received your degree, you are ordered to 16 weeks at the Officer Candidate School.

When you receive your commission, your obligation will be for from four to six years depending upon the time required to obtain your baccalaureate degree.

Here are the qualifications you have to meet. Check yourself against them and see how you do.

- You must be a high school gradtween 21 and 25 years old.
- *You must be a high school grad*uate or have completed three years of high school and possess a sufficiently high GED score (75th percentile) in each area. A desirable high school background includes four units of English, two and one-half to three units of mathematics and two or three units in physics, chemistry or biology.
- Your GCT plus ARI basic battery must be at least 118.
- You must be physically qualified. Minimum vision up to 20/100 each eye will be waived if it is correctable to 20/20 with standard lens and if there is no organic or progressive disease present. No other waivers will be considered.
- You must be a petty officer at the time of application.
- A conviction by either court-martial or civil court during the two-year period preceding your application will disqualify you, unless it was for a minor traffic violation.
- You must be recommended by your commanding officer.

A most important eligibility factor is your record of educational activity since entering the Navy. If your service record shows you have been spending your free time in constructive learning through correspondence courses or after-hours schooling, it makes sense that you'll be a pretty good bet as a full-time student. (Incidentally, if you enrolled in a college before entering the Navy and left with academic failures or a poor record, it would be mighty important, if not downright necessary for you to have evidence of constructive educational activity since then.) Higher math courses are particularly desirable.

NESEP schooling consists of regular academic and summer sessions in three primary areas; engineering, science and mathematics. Engineering majors include aeronautical, chemical, electrical, mechanical, metallurgical, nuclear and engineering physics.

In the sciences you can major in physics, nuclear physics, chemistry, meteorology and oceanography. All math majors, including systems analysis, must be approved by the Chief of Naval Personnel.

Your major, which is not approved until late in your sophomore year, is based on the recommendations of the university and its Professor of Naval Science.

While at school you may advance in rate in the normal manner; the only exception is that completion of practical factors and performance tests for advancement are waived for you. You remain an enlisted man (or woman) while enrolled as a NESEP scholar, and may not apply for any other in-service officer procurement program.

Your NESEP education will not last more than four consecutive years; this counts as a normal tour of shore duty. Normally, instruction does not continue once you've earned your baccalaureate; it may not take you four years if you have previous credits. (If you enroll with valid, and applicable, credits from other schools, you may be admitted with an advanced standing.)

If you are eligible for NESEP and wish to apply, BuPers Inst. 1510.69H outlines the procedure. Your letter application, following a standard format shown in the instruction, must reach the Chief of Naval Personnel no later than 1 November. Reports of your medical examination must accompany your application. (Before you are accepted into the program, your physical qualifications must be determined.)

You must obtain transcripts of any previous high school and college credits to accompany your application. (A note of caution: Any effort to conceal an academic record is considered disqualifying by all universities. It is necessary, therefore, for you to obtain transcripts for all periods of attendance in secondary or higher level schools, even if you were there less than a full semester.)

Another enclosure that must accompany your application is a handwritten statement (not more than one page) outlining your reasons for wanting to participate in NESEP. You must include in this statement your reasons for leaving any college you may have attended.

You'll then be interviewed by a board of three officers, appointed by your commanding officer. They will consolidate their evaluation of you, which will weigh heavily either for or against your selection. Next you talk with your CO; in turn he'll recommend you for NESEP only if he sees in you a good moral character, a motivation for career officer status, and academic potential. His recommendation will be in the form of an endorsement to your application.

Your next step up the NESEP ladder is a written examination. (NESEP exams are administered Navy-wide, to all applicants on the second Monday in November. Sample question: The vertex angle of an isosceles triangle exceeds each base angle by 30 degrees. Find the number of degrees in each angle of the triangle. The correct answer, taken from four possibilities: 50 degrees,

WATCH THAT DEADLINE!

Your NESEP application must reach the Chief of Naval Personnel by 1 November of this year.

50 degrees, 80 degrees.)

If you get as far as the exam and it doesn't slow you down, you're ready to be selected. The major considerations that go into your selection are based upon your service record, previous educational endeavor, CO's recommendation and your exam score. Final NESEP selections are made during February of the year of college entrance.

If selected, you will be issued orders in plenty of time to report to the Naval Preparatory School at Bainbridge, Md., or the Service School Command in San Diego. There you'll have nine weeks of math, physics, chemistry, English usage and orientation in college academic requirements. This training is given during the summer.

Here, too, you are interviewed; a field of study is assigned and a college or university is designated. Before you leave prep school you are discharged and reenlisted in the Regular Navy for a period of six years. (You reenlist in the usual manner in the rating you held at discharge. If you've shipped over for six years recently, you'll be permitted to extend your enlistment one or two years to acquire the necessary six years of obligated service.) Upon successful completion of the prep school and acceptance by a university, you're then ordered to the designated university to start your education in the fall term.

Each year you'll be given a physical examination to make sure you're still in shape. If you are found no longer physically qualified for a line commission, you may still be retained for an appointment in the restricted line or staff corps.

Physical unsoundness isn't the only way to be dropped from NESEP. The Bureau will see to it that you are disenrolled if your academic performance is low, or if you generally don't meet officer aptitude standards.

In any case, if you should be disenrolled, you would return to the Fleet in the rate and pay grade you hold at the time, and complete your enlistment.

At the end of your second year of studies, you must agree to extend your enlistment for an additional two years. Thus, by the time your school hitch is up, you will have the necessary four years' obligated service mentioned earlier.

All-Navy Cartoon Contest
S. R. Rodriguez, RMSN, USN.



"No, Son, your dad is not a one-star general."

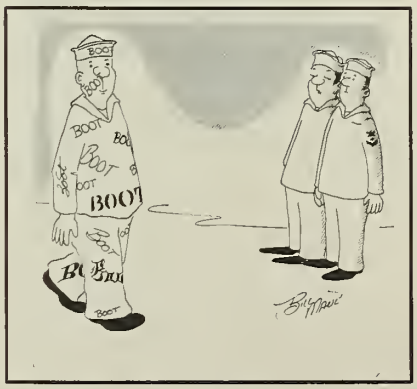
The complete NESEP picture is described in BuPers Inst. 1510.69H with such aids as sample application form, study guides and the CO's check-off list attached.

DIRECTIVES IN BRIEF

This listing is intended to serve only for generol informotion ond os on index of current Alnovs, BuPers Instructions, BuPers Notices, ond SecNov Instructions thot opply to most ships ond stations. Mony instructions ond notices ore not of generol interest ond hence will not be corried in this section. Since BuPers Notices ore orronged occording to their group number ond hove no consecutive number within the group, their dote of issue is included also for identificotion purposes. Personnel interested in specific directives should consult Alnavs, Instructions ond Notices for complete details before toking oction.

Alnavs opply to all Novy ond Marine Corps commonds; BuPers Instructions ond Notices opply to oll ships ond stotions.

All-Navy Cartoon Contest
William R. Maul, CTCA, USN.



"Boy, there's one who has it written all over him!"

Alnavs

No. 23—Announced convening of fiscal year 1965 selection boards to recommend line officers in the grade of commander on active duty (except TARs) for promotion to the grade of captain.

No. 24—Discussed Department of Defense policy in regard to Navy Department participation in public meetings.

No. 25—Announced that the Secretary of Defense had designated the period 20 through 25 July as defense cost reduction week.

No. 26—Announced approval by the President of reports of selection boards which had recommended Marine Corps officers for promotion to the grades of major general and brigadier general.

No. 27—Announced approval by the Secretary of the Navy for the President the report of a selection board which recommended line officers for temporary promotion to the grade of captain.

No. 28—Announced that the Military Pay Bill had been signed by the President and stated that its effective date was 1 September.

No. 29—Announced approval by the Secretary of the Navy for the President the report of a selection board that recommended Marine Corps officers for temporary promotion to the grade of colonel.

No. 30—Announced approval by the Secretary of the Navy for the President the report of a selection board which recommended women officers for temporary promotion to the grade of commander.

Instructions

No. 1220.6C—Defines the conditions under which active duty enlisted personnel may be retested with the Basic Test Battery without earlier approval of the Chief of Naval Personnel, establishes procedures for retesting and outlines the methods to be used in recording and reporting test results.

Notices

No. 1710 (7 August)—Discussed the need to solicit voluntary contributions for the 1964 Olympic Games.

No. 1710 (12 August)—Provided information concerning the 1965 All-Navy and Interservice Sports program.

No. 1110 (25 August)—Announced the annual nationwide competition for appointment as Cadet in the United States Coast Guard.

What You Should Know About BTB—the Basic Test Battery

THE SCORES you obtained on the Navy basic test battery—that series of aptitude tests you took in boot camp—determined your GCT, ARI, MECH and CLER scores which are entered in your service record. The primary purpose of the BTB was to help determine your eligibility to attend class "A" school after recruit training, but these scores remain in your record and are referred to when you apply for schooling or other special programs throughout your naval career.

Under certain circumstances you might warrant an opportunity to retake the BTB with a view toward improving your scores. This provision is not new, nor is it an open invitation to take another crack at the BTB when you would not stand to gain anything. But permission may be granted when you have a valid reason for wishing to retake the tests, such as:

- Your scores do not qualify you for a specific school or program you wish to enter (considering any waivers allowed); or
- You have substantially increased your general aptitude through study and work experience since taking the BTB.

Previously, all requests to retake the BTB had to receive BuPers approval. A recent change in policy now permits various field commands to process certain types of these requests, thus speeding up the processing time.

If you have a reason, such as described above, and feel you might benefit from a retest, you can apply through your command to one of the designated retest centers, providing you meet three other conditions:

- You are a high school graduate or the equivalent;
- You took your first BTB at least two years ago and can show evidence of subsequent self-improvement—in general education, language proficiency or other experience;
- You are a petty officer and have not taken the BTB more than once.

If you don't meet the above qualifications but still feel there is reason for you to request a retest, then you must direct your request to the Chief of Naval Personnel.

If you are not clear in your mind as to your future course of action why don't you, if opportunity and geography permit, stop in and discuss your problem with one of the experts at any one of the Enlisted Classification Units listed below?

However, before you take any drastic steps, keep these points in mind:

- You are allowed only one retest. Don't waste it.
- Some people score lower the second time around—and the new scores are the ones that will be recorded.
- You must take the entire Basic Test Battery during a retest, not just the one section in which you didn't do so well.
- Because these scores give only a broad indication of your aptitudes, the requirements set for many schools and programs are the general rule rather than the hard and fast rule, and many times waivers will be granted for lower scores. You may not require a retest.

Also, there is a new test battery being administered in the Fleet, called the Advanced Technician Test (ATT). It is anticipated that cutting scores for various types of advanced training for Navymen will eventually be based on the ATT.

Designated retest centers where requests can be forwarded are as follows:

Naval District Headquarters: First, Eighth, 10th, 13th, 15th and 17th Naval Districts.

OCS, Newport, R. I.

Naval Training Centers: Bainbridge, Md.; Great Lakes, Ill.; and San Diego, Calif.

Naval Receiving Stations: Brooklyn, N. Y.; Norfolk, Va.; Philadelphia, Pa.; and San Francisco, Calif.

Naval Air Station, Glynco, Ga.

Naval Stations: Charleston, S. C.; Washington, D. C.; Long Beach, Calif.; San Diego, Calif.; Guam, M. I.; Guantanamo Bay, Cuba; Pearl Harbor, Hawaii; Rata, Spain; and Subic Bay, P. I.

Fleet Activties, Sasebo, Japan.

Headquarters Support Activities, Yokosuka, Japan.

Medical Research Lab, SubBase, New London, Conn.

Chief Naval Air Basic Training, Pensacola, Fla.

Chief Naval Air Advanced Training, Corpus Christi, Texas.

Chief Naval Air Reserve Training, Glenview, Ill.

Naval Air Technical Training Center, Memphis, Tenn.

Naval Air Technical Training Unit, Jacksonville, Fla.

Further details on the basic battery tests may be found in BuPers Inst. 1220.6C of 5 Aug 1964.

WHAT'S IN A NAME

They Know Geronimo

Most people feel that airplanes are made to fly you from one point to another, but flying for Benny Tratter, John Beattie and Sam Wooley—PR1, 2 and 3 respectively—is a means to another end. They seldom land in the plane they go up in.



The trio has made 444 parachute jumps testing new and modified parachutes and skydiving.

They are currently packing parachutes for the aviator's equipment branch of Utility Squadron One at NAS Barber's Point, Hawaii. Do they trust their own work? Look at these statistics and decide for yourself:

Tratter has a total of 246 jumps, of which 233 were made while testing new and modified parachutes at the Naval Parachute Unit, El Centro, Calif. He has made jumps with Army Airborne units, sport (skydiving) jumps, and one at the completion of PR class "A" school.

Beattie has hit the silk 65 times. His first was the jump at the completion of PR class "A" school, and the other 64 were made with the Naval Parachute Unit.

Wooley made 133 jumps, most of them with the Army 77th Special Forces, and, of course, one at the completion of Navy PR school.

Do they yell "Geronimo?" Just as our interviewer was about to ask them, they disappeared out the door of the plane.

Table of Active Duty Service Pay Under New Law

MONTHLY BASIC PAY (BASED ON CUMULATIVE YEARS OF SERVICE, ACTIVE AND INACTIVE)

RANK OR PAY GRADE	Under 2 years	Over 2 years	Over 3 years	Over 4 years	Over 6 years	Over 8 years	Over 10 years	Over 12 years	Over 14 years	Over 16 years	Over 18 years	Over 20 years	Over 22 years	Over 26 years
O-10 Admiral	$1,302.00	$1,347.90	$1,347.90	$1,347.90	$1,347.90	$1,399.20	$1,399.20	$1,506.90	$1,506.90	$1,614.30	$1,614.30	$1,722.00	$1,722.00	$1,829.70
O-9 Vice Admiral	1,153.80	1,183.80	1,209.60	1,209.60	1,209.60	1,240.20	1,240.20	1,291.50	1,291.50	1,399.20	1,399.20	1,506.90	1,506.90	1,614.30
O-8 Rear Admiral (upper half)	1,045.20	1,076.40	1,101.90	1,101.90	1,101.90	1,183.80	1,183.80	1,240.20	1,240.20	1,291.50	1,347.90	1,399.20	1,455.60	1,455.60
O-7 Rear Admiral (lower half)	868.20	927.60	927.60	927.60	968.70	968.70	1,025.10	1,025.10	1,076.40	1,183.80	1,266.00	1,266.00	1,266.00	1,266.00
O-6 Captain	643.20	707.40	753.30	753.30	753.30	753.30	753.30	753.30	779.10	902.10	948.00	968.70	1,025.10	1,112.10
O-5 Commander	514.50	604.80	645.90	645.90	645.90	645.90	666.30	702.00	748.20	804.60	850.80	876.30	907.20	907.20
O-4 Lieutenant Commander	434.10	528.00	563.70	563.70	573.90	599.70	640.50	676.50	707.40	738.00	758.40	758.40	758.40	758.40
O-3 Lieutenant	353.70	450.90	481.80	533.10	558.60	579.00	609.90	640.50	656.10	656.10	656.10	656.10	656.10	656.10
O-2 Lieutenant (Junior Grade)	281.40	384.30	461.40	476.70	486.90	486.90	486.90	486.90	486.90	486.90	486.90	486.90	486.90	486.90
O-1 Ensign	241.20	307.50	384.30	384.30	384.30	384.30	384.30	384.30	384.30	384.30	384.30	384.30	384.30	384.30
O-3-E*				533.10	558.60	579.00	609.90	640.50	666.30	666.30	666.30	666.30	666.30	666.30
O-2-E*				476.70	486.90	502.20	528.00	548.40	563.70	563.70	563.70	563.70	563.70	563.70
O-1-E*				384.30	410.10	425.40	440.70	456.00	476.70	476.70	476.70	476.70	476.70	476.70
W-4 Chief WO	361.20	440.70	440.70	450.90	471.60	492.00	512.40	548.40	573.90	594.60	609.90	630.30	651.00	702.00
W-3 Chief WO	328.50	405.00	405.00	410.10	415.20	445.80	471.60	486.90	502.20	517.50	533.10	553.50	573.90	594.60
W-2 Chief WO	287.40	353.70	353.70	363.90	384.30	405.00	420.30	435.60	450.90	466.50	481.80	497.10	517.50	517.50
W-1 WO	238.20	312.60	312.60	338.40	353.70	369.00	384.30	399.90	415.20	430.50	445.80	461.40	461.40	461.40
E-9 Master CPO							445.80	456.00	466.50	476.70	486.90	497.10	522.90	573.90
E-8 Senior CPO						374.10	384.30	394.50	405.00	415.20	425.40	435.60	461.40	512.40
E-7 CPO	206.39	282.00	292.20	302.40	312.60	322.80	333.00	343.50	358.80	369.00	379.20	384.30	410.10	461.40
E-6 PO 1	175.81	246.00	256.20	266.40	276.90	287.10	297.30	312.60	322.80	333.00	338.40	338.40	338.40	338.40
E-5 PO 2	145.24	215.40	225.60	235.80	251.10	261.30	271.50	282.00	287.10	287.10	287.10	287.10	287.10	287.10
E-4 PO 3	122.30	184.50	194.70	210.00	220.50	220.50	220.50	220.50	220.50	220.50	220.50	220.50	220.50	220.50
E-3 SN, FN, AN, CN, TN, HN, DN	99.37	148.50	159.00	169.20	169.20	169.20	169.20	169.20	169.20	169.20	169.20	169.20	169.20	169.20
E-2 SA, FA, AA, CP, TA, HA, DA	85.80	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00	123.00
E-1 (Over 4 months), SR, etc	83.20	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80	112.80
E-1 (Under 4 months), SR, etc	78.00													

*Commissioned officers who have been credited with more than four years' active service as enlisted members.

ALL HANDS Magazine October 1964

The 1964 military pay raise was signed into law by the President on 12 August and became effective 1 September. The new pay scales apply both to Regular Navymen and to Reservists on active duty or active/inactive duty for training.

Naval Academy midshipmen, aviation cadets and Regular NROTC students are also included.

In the past, most pay bills covered retired men as well as those on active duty, but this one does not. Only those Navymen who retire or enter the Fleet Reserve after 1 Sep 1964 will receive any benefit from the new pay rates.

If You Want to Drive Your Car on Base, You'll Need Full Insurance Coverage

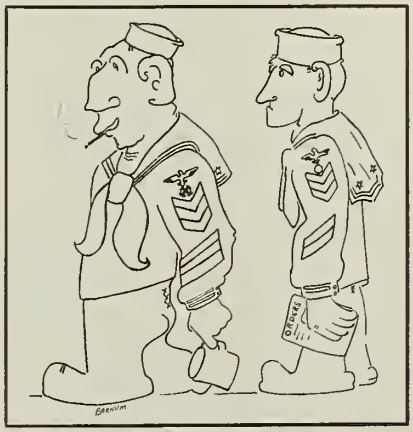
Stand by for a tightening of the regulations which cover the admittance of privately owned automobiles into Navy shore installations. Your car may be turned back at the gate.

If you have auto liability insurance coverage limited only to your base, it's not enough. Now, if you want to drive and park your car on a Navy installation, you must have off-base coverage as well.

However, there's no need for you to get a new policy immediately if you have the station-only type insurance; you may have a one-year grace period (from 1 Aug 1964) before you must have a new policy. Here's how this grace period will work:

When your present insurance expires, you must have a new policy that meets the requirements (see below) of SecNav Inst. 5560.1C. But you must have a new policy by 1 Aug 1965 no matter when your old one expires.

All-Navy Cartoon Contest
James R. Branum, CT1, USN.



"To get ahead in this man's Navy, you have to know the right people; let's go down to the galley and I'll introduce ya to the cooks."

The Navy can't require you to buy auto insurance, but it can—and will—refuse you permission to bring your car on the base if you don't have it.

This ruling applies if you wish to drive or park your car within the confines of any U. S. shore installation. (If you are stationed outside the continental U. S., the instruction will apply to you when you return stateside.)

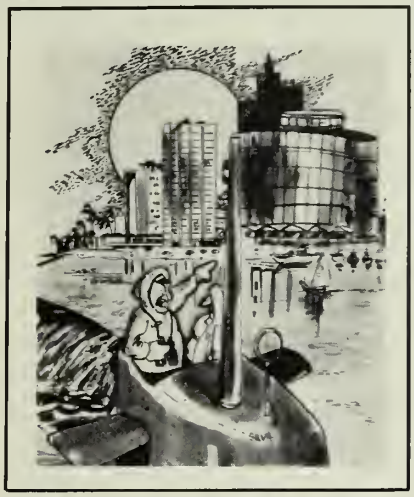
Here's a brief list of the requirements you should keep in mind when it's time for you to buy some new insurance.

- The company must be licensed in the state where you are stationed, homeported or presently residing. (This gives you a little leeway if

you live in one state and work in another. It also applies if you're transferred to another installation in another state, just as long as the insurer is licensed in the state where you bought the policy.)

- You'll need the minimum amount of insurance that the state where you're stationed (or residing) prescribes by law. (This, of course, varies from state to state, so check with your commanding officer if you don't already know.)
- The insurance must provide bodily injury and property damage liability coverage for all persons authorized to drive your car. (The persons whose names are on your policy may be the only ones covered when driving your car. If you let your buddy use your car, even though you signed a memo saying he has your permission, your insurance doesn't necessarily cover him.)
- You must have coverage for all passengers, if this is part of the state's law .
- There can be no territorial limitations, such as station-only coverage. However, a policy that insures you only in the United States and Canada is acceptable.

All-Navy Cartoon Contest
Leslie R. Silva, PN3, USN.



"Go get that hotshot navigator—I want him to be one of the first to see the North Pole!"

Once you have your new policy, you'll be issued a permanent type permit (if you don't have one already) which will avoid the necessity of giving you a pass each day to get your car on base. If you receive such a base sticker, it will be furnished at no cost to you.

To keep you abreast of your state's car insurance laws, your commanding officer will provide counseling on insurance buying and periodically publish information regarding your responsibilities.

If you're in pay grade E-3 or below, an officer qualified to explain the local insurance laws and regulations will counsel you when first reporting on a base, and again when you plan to buy a car.

He'll point out that judgments rendered against you as the result of an automobile accident could cost the major portion of your earnings for many years. Without insurance, you may not be able to settle claims promptly on your own, and may very well put your family and yourself under a severe financial strain.

Once you meet the insurance standards, your CO may occasionally require you to produce evidence that your insurance is still in force. (A note of caution: One of the conditions an insurance agency must meet when applying to your CO for accreditation is an agreement to notify him when your insurance terminates.)

Perhaps the best way to select an auto insurance company is to ask

This Question Keeps Coming Up

- **BAQ ENTITLEMENT**—There are occasions when you and your family can temporarily occupy government quarters and remain entitled to your BAQ (Basic Allowance for Quarters). The conditions governing this situation are explained in SecNav Inst. 7220.49.

Essentially, you remain entitled to BAQ when you and your dependents occupy government quarters under the following circumstances:

- When you are in a duty or leave status incident to a permanent change of station and your temporary stay in government quarters is 30 consecutive days or less at one location;
- When you are on leave not involving a permanent change of station and your stay is seven consecutive days or less at one location.

Government quarters in this case includes guest houses and public quarters. It does not include rental housing, inadequate public quarters or transient family accommodations; you do not forfeit your BAQ when staying in these types of places.

There are two exceptions to the general rule. First, you are not entitled to BAQ during temporary occupancy of government quarters while on leave if you continue to occupy the same public quarters you occupied at your permanent duty station before detachment.

Second, if you are staying in government quarters as a guest of another family, this does not affect your entitlement to BAQ—you can still receive it.

If your stay in government quarters while on leave exceeds the 30- or seven-day period prescribed, you remain entitled to receive BAQ for the maximum period, but you will forfeit it for any additional period.

This instruction also reflects a change in the rules governing the type of government quarters you may occupy at your permanent or temporary duty station, while remaining entitled to BAQ. This applies to officers in the following circumstances:

- At your permanent station, when adequate quarters are not available for your dependents and you yourself are permitted or required to occupy government quarters;
- When you are at a temporary station away from your permanent station.

The old rule stated that to remain eligible to receive BAQ in the above circumstances, you must stay in a one-room and bath accommodation. This rule has now been made more flexible, allowing you to stay in quarters that do not exceed the minimum requirements of those prescribed for your grade. However, if the only quarters available exceed the minimum standards, you can occupy the larger quarters—but you'll probably have to share them.

Provision is also made for senior officers, on official or diplomatic assignment outside the U. S., to occupy quarters which exceed the minimum standards for their grade if normal quarters are not available. This may occur when the officer is required to entertain officials of foreign governments.

your insured shipmates who drive their cars under similar circumstances.

If you learn beforehand how quickly the company comes through with assistance when policyholders have accidents, it may save you long delays without a car when, or if, you should have an accident.

Also, your cammanding officer can give you a list of agents who are authorized to sell policies for cars driven on your base. But, he cannot recommend one agent in preference to another.

A complete discussion on this subject is contained in SecNav Inst. 55-60.1C.

List of New Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Muscle Beach Party (2698) (C) (WS): Comedy; Frankie Avalon, Annette Funicello.

Panic Button (2699) (WS): Comedy; Maurice Chevalier, Jayne Mansfield.

The New Interns (2700): Drama; Michael Callan, Dean Jones.

A Tiger Walks (2701) (C): Drama; Brian Keith, Vera Miles

Affairs of Susan (2702): George Brent, Joan Fontaine (Re-Issue).

Take A Letter Darling (2703): Rosalind Russell, Fred MacMurray (Re-Issue).

When Irish Eyes are Smiling (2704); June Haver, Dick Haymes. (Re-Issue).

The Lost Weekend (2705); Ray Milland, Jane Wyman (Re-Issue).

Bedtime Story (2706) (C): Comedy; Marlon Brando, Shirley Jones.

Bullet for a Madman (2707) (C): Action Drama; Audie Murphy, Darren McGavin.

Strike Me Deadly (2708): Melodrama; Jeannine Riley, Gary Clarke

Island of the Blue Dolphins (2709) (C); Drama; Celia Kaye, Larry Domasind.

California (2710); Ray Milland, Barbara Stanwyck (Re-Issue).

Geronimo (2711); Preston Foster (Re-Issue).

Practically Yours (2712; Fred MacMurray, Claudette Colbert (Re-Issue).

All-Navy Cartoon Contest
James R. Branum, CT1, USN.



"Peabody, the division officer and I feel that you have been in the firerooms too long!"

On The Waterfront (2713): Marlon Brando, Rod Steiger (Re-Issue).

Law of the Lawless (2714) (C) (WS): Western; Dale Robertson, Yvonne DeCarlo.

The Evil of Frankenstein (2715) (C): Drama; Peter Cushing, Peter Woodthorpe

The Liars (2716): Melodrama; Dawn Addams, Jean Servais

Hey, There, It's Yogi Bear (2717) (C): Feature Cartoon

Saturday's Hero (2718): John Derek, Donna Reed (Re-Issue)

Pushover (2719); Fred MacMurray, Dorothy Malone (Re-Issue)

It Should Happen to You (2720); Judy Holiday, Michael O'Shea (Re-Issue).

The Remarkable Andrew (2721); Brian Donlevy, Ellen Drew (Re-Issue).

Goliath and the Vampires (2722) (C) (WS): Melodrama; Gordon Scott

Lady in a Cage (2723); Drama; Olivia de Havilland, Ann Sothern

Never Put it in Writing (2724): Comedy; Pat Boone, Milo O'Shea

Golden Earrings (2725): Drama; Ray Milland, Marlene Dietrich (Re-Issue).

• **SO CHANGED TO ST**—The title of the sonarman rating has been changed to sonar technician, and the rating abbreviation changed from SO to ST, effective 15 Jul 1964.

The service ratings remain the same. Sonar technician, surface, is now abbreviated STG and sonar technician, submarines, is STS.

The change was made to reflect the present-day technological aspect of the rating, in view of the fact that men in the sonar rating have a skill and depth of knowledge much greater than implied by the title sonarman, which denotes sonar operator.

It's All In the Family

USS *John Willis* (DE 1027) has something to crow about—a family reenlistment. But it wasn't two brothers who shipped over; it was man and wife.

Chief and Mrs. Robert Roberts reenlisted for four and six years respectively. The chief, a commissary man aboard *Willis*, is a 16-year Navyman.

Mrs. Roberts is a YN3 attached to the Newport Officer Candidate School staff. She reenlisted under the STAR program and is guaranteed Yeoman Class "B" School. Upon graduation she'll receive automatic advancement to second class if otherwise eligible.

The Roberts met while stationed at NAS Memphis, Tenn. At the time, she worked in the commissary office and he in the bake shop.

Another Roberts is in the Navy. The chief's brother, Richard, a parachute rigger third class, is stationed at NAS Brunswick, Maine.

Flight Pay for 20-Year Men

If you are a naval aviation observer or flight surgeon, you will be delighted to know this: You can draw flight pay without meeting the minimum monthly requirements if you've been aeronautically designated for 20 years or more.

This means even though you don't log any flight hours, you can still draw the flight pay. But you must be serving under orders that involve flying, and you must be ready and qualified to fly.

However, this right does not become effective until the month following your 20th year of designation. Thus if you want to collect the flight pay for the month you become a 20-year designator, make sure you've logged the minimum flight hours.

If you'd like to read more on the subject, check NavCompt Inst. 72-20.35 and *NavCompt Manual*, Volume four, Chapter four.

More New Ships on the Way

Thirty-six ships are in the news this month across the country. Some haven't progressed beyond the paperwork stage, while others have already joined the Fleet. Here's a roundup on shipbuilding activity for this month.

Contracts

The Bureau of Ships has awarded construction contracts for 26 escort ships to four shipyards. Ten of the contracts represent the Fiscal Year 1964 Shipbuilding and Conversion Program; the remaining 16 are authorized in the FY 1965 program.

• Twelve ships will be built in Seattle: DE 1052, DE 1053, DE 1054, DE 1057, DE 1062, DE 1063, DE 1064, DE 1065, DE 1066, DE 1069, DE 1070 and DE 1073.

• A San Pedro, Calif. shipyard received a contract to build seven: DE 1055, DE 1058, DE 1060, DE 1067, DE 1071, DE 1074 and DE 1076.

• The final seven will be built in Westwego, La: DE 1056, DE 1059, DE 1061, DE 1068, DE 1072, DE 1075, and DE 1077.

Representing a new class of escort ships, the DEs will have an overall length of 438 feet, a beam of approximately 47 feet and a full-load displacement of about 4000 tons. They will carry bow-mounted, long-range sonar, variable depth sonar, Drone Antisubmarine Helicopter (*Dash*), *Asroc* and antisubmarine torpedo launchers. In addition they will have a 5-inch/54 caliber gun mount; they'll also have space and weight reservations for a self-defense missile system.

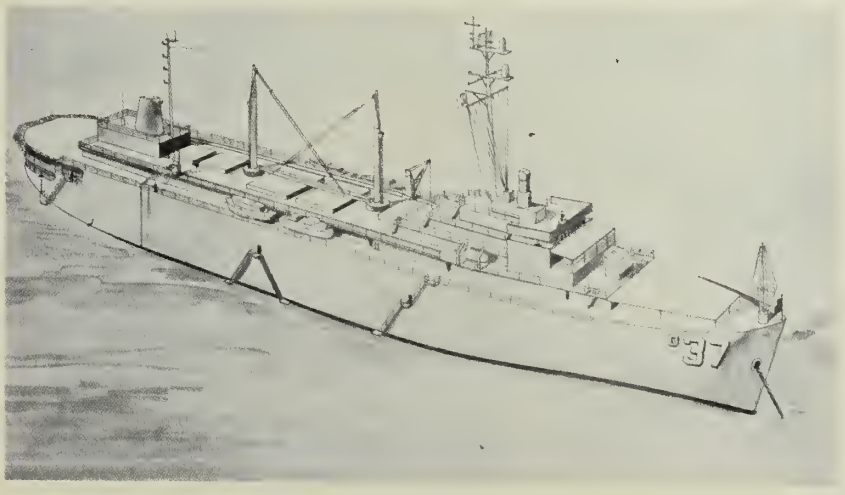


FOR HELICOPTERS ONLY—A *Sea King* of HS-4 makes first ground controlled approach landing at NAAS Ream Field, Imperial Beach, California.

Conversions

• A former merchant ship, the *Ethiopia Victory*, will be converted to a *Polaris* resupply cargo ship (AK-FBM). Capable of providing one-stop resupply to deployed *Polaris* submarine tenders, the AK-FBM will carry missiles, submarine weapons, frozen and dry provisions, general cargo, spare parts and petroleum products required to maintain a submarine tender on station. The ship will be operated by the Military Sea Transportation Service (MSTS).

• A World War II Navy landing ship will receive a face lifting job which will equip the ship for duty as a mine countermeasures ship. The contract calls for a two-year modernization and conversion program which will return the veteran *Catskill* to the active Fleet as MCS 1. Major changes will include modern armament and fire control systems, replacement of the old vehicle deck with work and storage spaces and the addition of a helicopter landing platform.



NEW CLASS—An artist's conception shows how the destroyer tender *Samuel Gompers* (AD 37) will look upon completion in Bremerton in spring of 1967.

Named

• The Secretary of the Navy has assigned the name *Francis Scott Key* to the nuclear-powered fleet ballistic missile submarine SSBN 657. This is the 40th of 41 *Polaris* submarines to be named.

Keel Laid

• The keel for the nuclear-powered fleet ballistic missile submarine *George Washington Carver* (SSBN 641) has been laid at Newport News, Va.

Launched

• *Simon Bolivar* (SSBN 641) was launched 22 August at Newport News. Her keel was laid 17 Apr 1963.

• The amphibious assault ship

Guam (LPH 9) was launched at the Philadelphia Naval Shipyard. *Guam's* keel was laid 15 Nov 1962.

• The oceanographic research ship *Thomas G. Thompson* (AGOR 9) was launched at Marinette, Wis. 18 July. Designed to be a floating laboratory, *Thompson* will be used in support of the National Oceanographic Research Program. The ship will displace 1370 tons and is 209 feet long. She will be civilian-manned and operated by MSTS. Her keel was laid 12 Sep 1963.

Commissioned

• USS *James Madison* (SSBN 627) was commissioned at Newport News 28 July. *Madison* is the 23rd SSBN to be commissioned. Her keel was laid 5 Mar 1962, and she was launched 15 Mar 1963.

• The 24th *Polaris* missile submarine, USS *Casimir Pulaski* (SSBN 633) was commissioned at Groton on 14 August. Her keel was laid 12 Jan 1963, and she was launched 1 Feb 1964.

• USS *Stonewall Jackson* (SSBN 634) was commissioned at Mare Island Naval Shipyard, Calif. on 26 August. Her keel was laid 4 Jul 1962.

Dewey's Loving Cup

A silver loving cup which once belonged to Admiral Dewey is now on board USS *Dewey* (DLG 14). It was bequeathed to the ship by the late George Goodwin Dewey, the admiral's son, who died in 1963.

The cup was given to Admiral Dewey by the city of Savannah, Ga., in March 1900. The admiral had returned to the U. S. in September 1899 after defeating the Spanish in the battle of Manila Bay without the loss of a single American life.



ADMIRAL'S CUP—Silver loving cup given to the Navy by ADM Dewey's son is now aboard frigate *Dewey*.

Other Dewey mementos, including a diamond-studded sword presented to him by President McKinley and a jewel-encrusted medal from the city of New York, were also willed to the Navy.

The silver cup will be displayed in *Dewey's* wardroom, along with several other mementos of the admiral's career.

European Softball Champs

The *Presidents* from USS *Franklin D. Roosevelt* (CVA 42) are the new European softball champions. The team rolled undefeated through a 10-team double elimination tournament in Naples to win the title. Sparked by the pitching of Charlie Thomas, AMSC, and Paul Kinch, ABH3, the *Presidents* won five consecutive gimes and an invitation to the CINCUSNAVEUR All-Navy elimination tournament.

In the first day of play the *Presidents* drew a tough Cyprus team as opponent and were forced to go 12 innings before winning 1-0. The winning run was driven in on a long double by outfielder Don Nunn, SN. Kinch pitched the entire game, giving up only two hits and striking out 29 batters.

Thomas hurled a shutout against *USS Enterprise* (CVAN 65) on the following day as the *Presidents* won their second game 2-0.. Next *FDR's* victory-bound team faced the Naples *All Stars*. Kinch and Thomas combined to throw a two-hitter and the *Presidents* took it 3-1. The run scored by Naples was the only one scored against *Roosevelt* pitching in 40 innings of tournament play.

In the semi-final and final rounds the *Presidents* faced the SHAPE Air Force, Paris team. They took the semis 2-0 and exploded for five runs in the seventh inning of the final game to clinch a 6-0 victory.

By winning their last 13 games, the *Presidents* have upped their season record to 16 wins against three defeats.

'Valley' Knows Its Weather

When USS *Valley Forge* (LPH 8) makes a weather observation, she knows what she's talking about. Weather experts on this PacFlt am-

VISITOR—*DeSoto County* (LST 1171) cruises Lake Michigan with Norway's *Christian Radich* during tour of Great Lakes.





BIG CITY VISITOR—The attack aircraft carrier *USS Independence* (CVA 62) passes New York City's famous skyline.

phibious assault ship are so consistently correct that their ship has won the top CNO Weather Service Award for ship surface observations.

The award is given annually to the ship and shore station exhibiting the highest proficiency in surface and upper-air observations. The excellence award for upper-air observations for ships went to USS *Kretchmer* (DER 329). NAS Atsugi, Japan, took first place for shore station surface observations, while Fleet Weather Central, Kenitra, Morocco, was cited in the upper-air category.

Of 1254 observations made by *Valley Forge* during 1963, only two discrepancies were noted in review of the records. This represents an error percentile of 0.2. Qualification for the competition requires each ship within a category to make at least 400 weather observations during the calendar year and maintain an error percentile of not more than 0.5.

Valley Forge came from 77th place in the 1962 competition to win this year.

The top performance was turned in by NAS Atsugi, which recorded 8760 observations without one error.

The award for outstanding performance went to NAF Naples for the high level of performance by weather service personnel in conducting flight briefings for U.S. and NATO military pilots and for the effectiveness of their services to Fleet units.

Special Merit Awards were presented to VW-1 and VW-4 for their outstanding performance, over a two-year period, in the missions of hurricane/typhoon reconnaissance.

He's Striking For 100

Ever talk to someone who could tell you about the "old Navy—the turn-of-the-century Navy? One man who's knowledgeable on this subject, CAPT Curtis H. Dickins, Chaplain Corps USN (Ret), learned about it firsthand. He was commissioned in the Corps in 1898, at the age of 33, and went on to a 31-year naval career. Today, at 99 plus, he's close to gaining membership in the Century Club.

Much of his Navy time was spent at sea. He served on USS *Constellation* (the frigate, not the carrier), *Chicago, Kearsarge* (BB5), *Tennessee* (BB43), *Prairie, Florida* (BB30), *New Mexico* (BB40) *and California* (BB44). In addition, he spent three tours at the Navy Yard, Portsmouth, a tour at the Navy Yard, Philadelphia, and was the Navy's third Chief of Chaplains.

When serving aboard *Florida* (1912 to 1915) he was instrumental in replacing the old hand laundry system with modern machinery. *Florida* sailors were soon so much "whiter" than others in the Fleet that the machines were installed on other vessels.

Ashore, some chaplains in the U. S. around this period were having difficulty performing their work because they lacked suitable places to hold Divine Services. Chaplain Dickins faced this problem at the Philadelphia Navy Yard, where 25,000 recruits were in training. He appealed to the Secretary of the Navy for funds to erect a large recreational hall which could be used for many purposes, including Divine Services, but no money was available. So Dickins turned to private sources and raised enough money to purchase two large tents.

These served the purpose during the summer, but with winter approaching Dickins decided to improve the situation further. He raised an additional $40,000 from private sources and erected two temporary buildings—one a hall with bowling alleys and a canteen, the other an assembly hall.

His other experiences included war duty in Vera Cruz,where he was wounded.

Since retiring from the Navy 35



I WON'T FORGET—Santa Claus got a list of gifts wanted for Christmas from *USS Mills* crew before they left the U. S. for Operation Deep Freeze '65.

years ago, Chaplain Dickins has continued to serve his church, and has taken a particular interest in current events. He resides in San Diego, Calif.

Flying Becomes Safer

CNO Aviation Safety Awards have been presented to 34 Navy and Marine Corps aviation units, and three aircraft carriers have won Flatley Awards, also for aviation safety.

The Flatley Award goes annually to the CVA, CVS and LPH which leads its field in accident prevention.

Chief of Naval Operations Aviation Safety Awards are given each fiscal year to the units which have made the most outstanding contributions to the Navy's aviation safety program. Competition is held in the six aviation type commands, and squadrons compete with similar squadrons within their command. An AirPac fighter squadron, for instance, competes with other AirPac fighter squadrons.

Winners for fiscal year 1964 are:

FLATLEY AWARD

USS *Franklin D. Roosevelt* (CVA 42)
USS *Intrepid* (CVS 11)
USS *Iwo Jima* (LPH 2)

CNO SAFETY AWARDS

Naval Air Force, Atlantic:
- **Fighter Squadron 33**
- **Attack Squadron 66**
- **Attack Squadron 65**
- **Fighter Squadron 101**
- **Carrier Air Wing 6**
- **Carrier Antisubmarine Air Group 56**
- **Patral Squadron 45**
- **Air Antisubmarine Squadran 24**

Naval Air Force, Pacific:
- **Fighter Squadron 151**
- **Heavy Attack Squadran 13**
- **Patral Squadron 31**
- **Fleet Tactical Support Squadron 21**
- **Helicapter Squadron 2**
- **Light Phatagraphic Squadran 63**

Air Force, Fleet Marine Farce, Atlantic:
- **Marine Fighter Squadran (All Weather) 541**
- **Marine Observatian Squadran 1**

Air Farce, Fleet Marine Farce, Pacific:
- **Marine Attack Squadron 211**
- **Marine Helicopter Transpart Squadran 364**
- **Marine H. Q. and Maintenance Squadran 15**

Naval Training Command:
- **Training Squadran 24**
- **Training Squadran 27**
- **Training Squadran 7**
- **Training Sqadron 33**
- **Naval Air Station Memphis, Tenn.**

Naval Reserve Training Command:
- **Fighter Squadron 672**
- **Attack Squadron 771**
- **Patral Squadran 812**
- **Air Antisubmarine Squadran 663**
- **Fleet Tactical Support Squadran 741**
- **Helicapter Squadran 813**

Marine Training Cammand
- **Marine Fighter Squadron 611**
- **Marine Attack Squadron 322**
- **Marine Helicapter Transport Squadran 234**
- **Marine Medium Helicapter Squadron 772**

South for the Winter

USS *Mills* (DER 383) has left the U. S. to take part in this year's Operation Deep Freeze. *Mills* is scheduled to patrol an area about halfway between New Zealand and McMurdo Sound, Antarctica. She will supply weather information and aid in navigation to aircraft flying between Christchurch, New Zealand, and Little America.

Mills was chosen for Deep Freeze partly because she is powered by diesel engines. Diesel-powered ships have greater underway endurance than black-oil types. The radar picket will operate from Dunedin, New Zealand, making 25-to 30-day patrols in her assigned area.

The ship's crew has had cold weather duty before, though never with Operation Deep Freeze. Last year they were stationed quite a bit further north, on the Greenland-Iceland-United Kingdom barrier.

Send the Buoy, Not the Man

A buoy to mark the location of a man overboard by reflecting radar signals, flashing a light and dyeing the surrounding water a passionate purple has been built by three USS *Ticonderoga* (CVA 14) Navymen.

Employing the fine art of cumshaw, Ben Swanson, ATC; Elton Forbes, AE1; and Claude Freeman, AMS2, welded two barrels together to form a cylinder. At the top they attached a steel post and two round, stainless steel plates to act as radar reflectors.

Dye markers which burst upon contact with water were placed in the buoy's base along with salt water batteries which furnished power for twin lights at the top of the buoy.

One dark night, *Ticonderoga* dropped the buoy over the side in a man overboard drill. The CVA and her two accompanying destroyers, USS *Prichett* (DD 561) and *Cowell* (DD 547) steamed about 10 miles away to lose contact with the buoy, then reversed their course. The buoy could be spotted while the ships were still five miles away.

If there had really been a man overboard that night, he could have used the life ring on the buoy's midsection or clung to it until rescued.

If the man overboard isn't able to reach the buoy, its rate of drift is about the same as a man's which would keep the two within a reasonable distance of each other.

MCB 7 Takes Peltier Award

Mobile Construction Battalion Seven received the Peltier Award for its outstanding performance during 1963. It was its second time to win the four-year-old Award.

When the Cuban crisis broke in October 1962, MCB Seven deployed immediately to Guantanamo Bay. For nine months it was there working on projects it was originally going to undertake that December. It constructed base defenses and supplemented the defensive manpower.

Seven's most important job during the crisis was "Project Might," in which bunkers and other weapons emplacements were built along the defensive perimeter of the base. MCB Seven also manned these positions when necessary.

A bronze medallion mounted on a plaque, the Award is named for former Chief of the Bureau of Yards and Docks, Admiral E. J. Peltier, CEC, (Ret). It was first presented in 1961 to MCB Nine, on the West Coast, for its work at Okinawa and Adak, Alaska, during 1960. MCB Seven received it the next year, and MCB One took it last year for its 1962 deployment to Antarctica.

Dig Down Deep, Fellas

A deep subject has been reinstated at the U. S. Naval Schools Construction (NAVSCON), Port Hueneme, Calif. The Seabees are learning the art of deep-well drilling.

The course was added to the school's curriculum because of the shortage of drinkable water in friendly Southeast Asian countries. During World War II Seabees drilled deep wells, but since then, this phase had been dropped from NAVSCON's curriculum.

Stories about the critical need of drinkable water in these countries had come to the school through Seabee Technical Assistance Teams. It seemed a good idea to lay a little groundwork in case the Seabees should be asked to repeat their earlier miracles. If so, NAVSCON would be asked to provide the training for the younger generation.

The forethought paid off. NAVSCON received its first request early this year.

Proceeding on the principle that there is no substitute for actual practice, a selected group of Seabees went up to Rose Valley, a site high in the Los Padres National Forest to set up this phase of training. The terrain is similar in many ways to Southeast Asia.

From the beginning the instructors

How Do You Explain a Sand Box to the Auditors?

The people-to-people program and the fleet oiler USS *Hassayampa* (AO 145) aren't strangers. For the past two years, five orphanages in Nagasaki, Japan, have benefited from this acquaintance. In addition to donating several tons of clothing, men of the oiler have presented the orphanages with more than $1500 and many bicycles for their older students.

In a recent visit to Sasebo, several *Hassayampa* men climbed aboard a bus and drove 50 miles south to Nagasaki. First they distributed clothing among the orphanages; next they began a first-rate repair and paint job on two of them.

Later that day, the Navymen added their personal touch—a barbecue *Hassayampa* style. With 400 children working on the hamburgers, potato salad and ice cream, the cooks were kept busy. In no time at all they lost count of the food consumed.

Japanese families entertained the *Hassayampa* men that night. Hesitant at first because their homes might not be what the visitors expected, the anxieties of the hosts vanished when the Navymen showed deep interest and enthusiasm for local customs.

The next day there was still work to do. After completing the routine repairs and painting, an additional flourish to the project was added—a number of sandboxes for the children.

Before the Navymen returned to their ship in Sasebo, several students presented *Kenko*, a ceremonial sword match as a thank-you.





PAINTERS—Men from the oiler *USS Hassayampa* (AO 145) put painting experience to use on Japanese orphanage.



SERVICE AT SEA—ASW support carrier *USS Randolph* (CVS 15) refuels *USS Cubera* (SS 347) with jury-rigged system during operations in the Atlantic.

emphasized the need for *deep* wells, since health hazards are common to relatively shallow wells. These usually are contaminated from the surface and frequently deliver a low quality of water from the standpoint of mineral content.

About 60 per cent of the time the Seabees found water. When they did, it was the signal to place a six-inch casing into the hole. This prevented the sides from slipping and provided the space through which the pump pipe was placed.

The next step was to develop the well—a technique of surging the water up through a screen to determine if there were enough water of proper quality.

In the final step, the Seabees set the pump and arranged for the chlorination and storage of the water.

Their training completed, the first teams headed for Southeast Asia.

Friendship Often Sprouts in Far Places

A Navyman aboard the support aircraft carrier USS *Kearsarge* (CVS 33) prefers to apply his personal touch to the people-to-people program. His venture has ended—for the time being—with a trip to Gotemba, a community near Mount Fuji where Lawrence Gallagher, AT1, delivered 10,000 U. S. plant seeds to a local farmer.

The project began during *Kearsarge's* last cruise to the Far East when Gallagher, an ex-farmer himself, and Kiochiro Hayashi met near Gotemba and, as a result of comparing notes, became friends.

Struck by the similarity of their problems, Gallagher wrote to a friend in his home state of New Jersey, asking for a variety of plant seeds which, he thought, might do well in Gotemba. He received them before *Kearsarge* returned to Yokosuka for a second port call.

In turn, Gallagher passed the seeds on to 35 young farmers, members of an organization roughly equivalent to our 4-H Club, when he returned to Gotemba.

Planted last winter, the seeds unfortunately were destroyed when the area was hit by an unexpected cold wave.

When *Kearsarge* returned to Yokosuka after joining the Seventh Fleet this year, Gallagher again made the trip to Gotemba and presented Hayashi with a number of gifts that included a fresh supply of seeds. These were turned over to a local agricultural improvement representative for distribution to Japanese students.

Gallagher also brought a slide projector and slides showing farm and family life in the United States. He presented these in the Hayashi home and in a nearby temple.

Basic Theme With Variations

It isn't very often a submarine is refueled from an aircraft carrier—and from a jury-rig at that. While on her summer midshipmen's cruise, USS *Randolph* (CVS 15) refueled USS *Cubera* (SS 347) in just that manner. Here's how they did it:

The hose was hooked to *Randolph's* aviation fuel pumping stations instead of the refueling system. Using a wire equipped with two trolleys and blocks to suspend the 1½-inch hose, the refueling detail aboard the carrier passed it to *Cubera* as a standard highline.

An extra 100 feet of hose was highlined first to allow enough slack to reach the submarine's after fueling connection. Through this jury-rig, *Cubera* took on 6500 gallons of JP5 fuel in two hours and eight minutes.

Although it is slightly more expensive, JP5 may be used in a submarine instead of diesel. In fact, it's cheaper for a submarine operating at sea to take on JP5 than to steam many miles out of its way to refuel with diesel.

During the entire operation the ComNavAirLant band supplied the submariners with some lively tunes. The band was temporarily assigned to *Randolph* for the midshipmen's cruise.

Scanner's Chiefs Know How

For the third time in as many years, a USS *Scanner* (AGR 5) chief petty officer has received the Secretary of the Navy Commendation for Achievement Award.

The latest *Scanner* Navyman to receive the award was Senior Chief Boilerman John E. Bretthauer. Bretthauer's citation credited him with superior performance in the field of leadership, professional skill, and resourcefulness in carrying out his responsibilities.

In 1962, *Scanner's* Chief Boatswain's Mate Charles M. Cogdell pinned on the ribbon. In 1963 another *Scanner* Navyman, Senior Chief Electrician's Mate Lawrence C. Woughter, won the SecNev Commendation.

About 340 Navymen have received the SecNav Commendation for Achievement Award since its inauguration in 1962. To earn the award an enlisted man must make an important contribution to the Navy, greatly exceeding that which would normally be expected of him. This contribution may be in the field of leadership or related to the Navy-

man's professional skill—or both. Lieutenant commanders and below may also receive the commendation, but their contribution must be in their professional field.

Scanner is a West Coast radar picket ship.

Exotic Port, This Frisco

Four destroyers under the flag of the Rising Sun entered San Francisco recently for their first port of call in continental United States. The five-day tour was much like a visit of a group of our ships to a Japanese port, in reverse.

The squadron, on a training cruise with 160 newly commissioned ensigns and 1150 crew members, is made up of two new Japanese destroyers and two former U. S. ships. There was plenty to keep the visitors busy in San Francisco.

The squadron commander, Rear Admiral Kazutori Kuhara, visited with Fleet Admiral Chester W. Nimitz, USN, and the acting mayor of the city. To the latter he presented a group of drawings made by school children in Osaka and Yokosuka.

Meanwhile, the trainees toured U. S. Navy radar picket ships and the Naval Schools Command at Treasure Island. They were taken through the highly automated Naval Supply Center, Oakland, and the overhaul and repair section of NAS Alameda. They were later addressed by FADM Nimitz.

The visiting ships held open house, during which more than 4000 inquisitive San Franciscans took a look at life aboard typical Japanese ships.

Then, of course, there were the inevitable tours and sightseeing jaunts. Points of greatest interest were Chinatown, the Golden Gate bridge and Golden Gate park, with its Japanese tea gardens, museum, statues, lakes and grounds. The Japanese navymen conducted traditional graveside ceremonies at the local Japanese cemetery to pay respect to their deceased countrymen on this side of the Pacific.

No port visit is complete without some sporting events, so the visitors met U.S. sailors from Treasure Island in basketball, volleyball and softball contests. They also put on judo and kendo demonstrations for the visitors' benefit.

To wind up their visit, the entire squadron was entertained at a picnic sponsored by the Japanese Northern California Committee.

They seemed to enjoy the United States as much as U.S. sailors enjoy Japan. Everyone had a good time.

FOUR JAPANESE destroyers including *Teruzuki* (DD 162) left and *Yugure* (DD 184) make a port visit to San Francisco on Pacific training cruise.





A CONSTANT REMINDER—The idea of placing on doors signs which aid in keeping Navymen aware of the importance of practicing effective leadership at all times and at all levels originated in Attack Squadron Forty-Five based at Cecil Field, Fla. Here, the eyes of Yeoman First Class K. W. Lerner, USN, are directed toward one such 'reminder' as he prepares to enter one of the doors at the Bureau of Naval Personnel. The signs can be made locally and may include a 'pull or push' for leadership, depending upon which way the door swings.

Handy Gadgets, These Helos

Helicopter Utility Squadron One at NAAS Ream Field, Imperial Beach, Calif., has a new aircraft, the UH-46A *Sea Knight*.

As part of the Navy's vertical replenishment program, the new medium utility helicopter transfers cargo from replenishment to combatant ships while they are underway at sea.

Using this method of transfer, ships to be replenished need not reduce their speed during operations. They'll stay in their task force formation and lessen the possibility of collision.

A 10,000-pound-capacity hook under the fuselage allows the external transport of cargo. Since the rear ramp can be left open during flight, the helicopter can haul objects that are longer than the cargo compartment, such as missiles. Even in the roughest seas, cargo can be loaded or unloaded.

Emergency water landings and take-offs are possible in the *Sea Knight*. It's also able to transfer personnel from ship to ship and conduct emergency search and rescue operations. The helicopter can fly 100 nautical miles, rescue 20 persons and then return to ship or shore.



FINE FEEDER—*USS Tracer* (AGR 15) took top Navy award for small ship mess.

Marines Take LantFlt Tilt

Fleet Marine Force Atlantic has captured the 1964 Atlantic Fleet tennis championship at Newport Naval Base.

Play for the trophy went down to the wire between the champs and the CruDesLant team. The two squads were tied at 13-13 going into the open doubles final. In the battle that followed, Marine First Lieutenants John Carlton and James Pearson stopped the CruDesLant duo of Lieutenant (jg) John Bennett and Ensign Frank Swanson 6-4, 11-9, 6-4, giving the Leathernecks 18 points and the title.

The loss dropped CruDesLant to third place in the final standings, one point behind Amphibious Force Atlantic's 14.

It appeared that CruDesLant would wrap up the championship early in the final day's action. Pitted against PhibLant's Lieutenant Dick Hoff in the open singles final, LT Bennett raced to a 5-3 first set lead. Then Hoff came back, taking four straight and the set. From then on it was all Hoff as the lanky PhibLant netter took 6-1 and 6-3 set wins and the singles trophy.

The day's senior doubles finale produced the real cliff-hanger. Moving to a 6-0 first set triumph, the Marine duo of LTCOL James Tuma and Chief Warrant Officer Art Farrington held a big lead over CruDesLant's Commander Bruce Flory and Captain Grover Rawlings. The tide turned in the second set, with the Flory-Rawlings duo winning 6-3. The CruDesLant twosome raced to a 5-1 edge in the deciding set before their opponents came to life. Aided by a number of double faults by the CruDesLant team, the Marines won three games in a row before bowing in the 10th game.

In other action, Commander Flory cruised to the senior singles title with a 7-5, 6-2, win over Farrington.

Final standings, Atlantic Fleet Tourney:

1. FMFLant—18
2. ComPhibLant—14
3. ComCruDesLant—13
4. ComSubLant—11
5. NavAirLant—4
6. ComServLant—2

Sproston Much-Decorated Ship

USS *Sproston* (DD 577) is now a respectable 21 years old and far from decrepit. In fact not too long ago, she found herself one of the most decorated ships in the Pacific Fleet Cruiser-Destroyer Force.

Boasting a total of eight competitive awards, *Sproston* earned the Weapons "W" (one of five awarded in the Cruiser-Destroyer Force Pacific), the Operations "E," the Antisubmarine Warfare "A" and Gunnery "E's" on three of her four gun mounts. She was judged best in gunnery for Destroyer Squadron 25 and was second in competition for the Battle Efficiency "E."

In addition to her fighting prowess, *Sproston* showed she could play hard too. In athletic competition with other units of Destroyer Flotilla Five, she acquired three firsts (two basketball and one volleyball) and numerous seconds. She won the Commodore's Cup Trophy as the 1963 Flotilla athletic champion.

For Sam Malta, TM2, 1963 was also a good year. He was chosen as *Sproston's* Man of the Year.

ON THE SPOT—Helo from *USS Constellation* (CVA 64) makes routine stop on fantail of the guided missile frigate *USS Gridley* (DLG 21).



LETTERS TO THE EDITOR

There Are Many Kinds of Sea Duty

SIR: What's the difference, if any, between the terms "preferred sea duty" and "arduous sea duty?" If a man is on the current Shorvey and his present duty station becomes preferred sea duty before his transfer, would he be extended at his present duty station? If so, would a request for transfer to arduous sea duty be justifiable?—J. S. SO1, USN.

• *In the "Enlisted Transfer Manual," three types of sea duty are defined: toured, overseas service and arduous.*

Toured sea duty is performed in nonrotated ships or units (these usually are under the administrative control of a fleet or type commander) homeported in a foreign country. The tour may not necessarily be the same as that for the overseas home port or geographical area, but it won't be longer than the tour lengths established by the Secretary of Defense.

You're assigned in an overseas service category when you're at a shore activity outside the continental U. S. (except Alaska and Hawaii).

Arduous sea duty is performed aboard ships or units which spend considerable time at sea away from their home port during local operations; when they're deployed, they usually operate at sea extensively.

Preferred sea duty is performed aboard ships and units homeported in the U. S. which do not deploy for extended periods; they either remain in their home port or operate from there for short periods. The term "preferred sea duty" is used only by Fleet EPDOs.

Upon change of status from shore to sea duty, everyone will be given a Sea Duty Commencement Date (SDCD) as of when their status is changed.

If you want arduous sea duty, submit a request through normal channels. It will be forwarded to your EPDO. —ED.

Place of Reenlistment

SIR: I would like a clarification of "Place of Reenlistment" as specified in *BuPers Manual*, Art. C-1403(4), which states: "Reenlistment may be effected on board ship while serving at sea provided the necessary facilities for effecting payments incident to separation and for conducting separation physical and dental examinations are available on board."

Does "on board" specifically mean that the disbursing and medical facilities must be attached to the ship?

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

If so, this would seem to pose an inconvenience, in some cases, to the many ships which do not have these facilities, and a disappointment to some crew members who might wish to reenlist at sea.

If a ship without the necessary medical and disbursing facilities is due to deploy with a couple of crew members who are due for reenlistment within days, couldn't these men receive physical exams before departing, and be paid at the next facility the ship encounters?

Or is it the object of this article to restrict certain ships from reenlisting men at sea?—G. A. V., YN3, USN.

• *The provisions of Article C-1403-(4) outline the normal procedure for effecting reenlistment at sea, but there is no objection to reenlistment on board ships not having the specified facilities if, as you say, the physical examination is given just before deployment and payments are made immediately upon return to port. Reenlistment in such cases is considered to be "on board."*

Early reenlistment under the provisions of "BuPers Manual," Art. C-10317, should be considered as an alternative for those individuals whose enlistments will expire while deployed on ships not having necessary facilities for physical examinations and disbursing.—ED.

Ships Can't Run Without Fuel

SIR: In your July issue there was an article about Operation Red Cloud and Springboard 64. You listed, by name, all the carriers and guided missile ships—but you didn't mention the auxiliary ships.

During the Springboard operation my ship, USS *Canisteo* (AO 99) refueled 143 vessels including all those you listed. I and the rest of the crew feel we have established a record for refueling operations during a Springboard operation. We also feel you should try to give more recognition to the fleet oiler in the future, for the AO is an important part of our country's defense. Without our long hours of work, exercises like Springboard could not be conducted.—G. R., SFP3, USN.

• *We agree: The importance of the fleet oiler should not be underestimated. Credit should be given when credit is due, and from the story it certainly seems that your ship deserved to be listed.*

You say you refueled 143 ships? You must have been very busy. Too busy, we suspect, to drop us a line and tell us the details about it.—ED.

Mt. Hood Mystery

SIR: I understand the ammunition ship USS *Mt. Hood* (AE 11) exploded somewhere in the Pacific during World War II. Can you tell me where it happened, when, and how?—H. F., Sheridan, Wyo.

• Mt. Hood *exploded while riding at anchor in Seeadler Harbor, Manus Island (in the Admiralties) on 10 Nov 1944.*

So much for your first two questions. As for the third, your guess is as good as anyone's. The survivors don't know what happened, and neither do we.

One account of the disaster may be found on page 49 of "Battle Report (Volume Five), Victory in the Pacific" by Captain Walter Karig, USNR.

On the morning of 10 Nov 1944 a boatload of 11 men were preparing to leave Mt Hood, *bound for assorted missions ashore. A lieutenant joined them before they cast off. They, and six other men already absent from the ship were to be the only survivors.*

At 0800 the 12 men who had come ashore in the boat were walking up the beach. Mt Hood *erupted in a ball of flame and they were knocked flat by the concussion. Smoke shot 7000 feet into the sky and smothered the area for a quarter-mile radius. The explosion blasted a trough in the ocean floor a city block long, 50 feet wide and 40 feet deep.*

Of the ships in the harbor, 34 were damaged. USS Argonne *(AP 4), very near the ammo ship, was badly damaged.* USS Oberrender *(DE 344), 1500 yards away, was hit by a piece of shrapnel which punched a hole in her side and killed several sailors. The destroyer tender* USS Piedmont *(AD 17), nearly a mile away, was hit by two 500-pound bombs which penetrated four decks but, miraculously, did not explode.*

A total of 372 men were killed or



NEW CHOPPERS—UH-46A *Sea Knights* of Helicopter Utility Squadron One give added strength to the Navy's important vertical replenishment program.

missing and 371 were wounded. The largest remaining piece of the ammunition ship was a fragment of metal some 16 feet long and 10 feet wide.

Two hours later Tokyo Rose announced that the ship had been destroyed by a midget submarine. Several eyewitnesses, on the other hand, claimed they saw an unmarked aircraft drop a bomb on the ship seconds before the blast. And one destroyer fired on a plane which seemed to fly from the cloud of smoke.

Unfortunately, any conclusive evidence went up in the explosion, and we'll probably never know for sure.—ED.

The Plane Is Quicker Than the Eye

SIR: Of the 50,000 accident-free launchings claimed by USS *Bon Homme Richard* (CVA 31) in the April 1964 issue, how many were made by planes with their engine air intakes completely covered and without a pilot? That's the way it looks from the photo you published. Kinda casts a cloud over all such claims, I'm thinking.—G. E. H.

• *Don't* DO *that to us. No matter how many boners we make, we're still inclined to take each one seriously.*

However, after a good hard second look at the original photograph, we feel much better. You are, we suspect, the victim of a rather remarkable shot in which the camera speed was just slow enough to blur slightly the front end of the plane and not (noticeably) the tail portion. The pilot is there—honest—as his helmet and O^2 mask are visible in the original. Again, blur makes the air intake appear to be covered, but that is, we think, because the inside is painted white. As you know, air intake covers are painted red, not white. Okay?—ED.

SIR: You're right; I'm wrong!

After my letter to you was posted, some busybody made an enlargement about half the size of a desk top of the photo. Sure enough, there *was* a head in the cockpit.

We still couldn't decide if the intake was open, but we figured the photo was for real.

I felt rather foolish, but then try as I might, I do make mistakes, sometimes more than one a day. I hoped my letter would be lost or ignored, but neither happened.

My apologies and thanks for having taken part of your busy day to answer a letter from a crank. It indicates your interest in exactness and in setting readers straight. I stand straightened.—G. E. H.

• *De nada.*—ED.

Tallahatchie County Sea Story

SIR: I am an avid reader of ALL HANDS; however, I am slightly disappointed. You have printed several articles concerning ships which are "one of a kind," but I have as yet to see an article about USS *Tallahatchie County* (AVB 2).

Having started life as LST 1154, *Tallahatchie County* underwent a multi-million dollar conversion which included installation of a new aluminum superstructure with a deck area considerably larger than the original one. The job was done at Naval Shipyard, Charleston, S. C., between December 1960 and February 1962, when she was recommissioned. After various shakedown activities and underway training at Little Creek, *Talle County* was deployed to the Med for duty with the Sixth Fleet.

AVB stands for advanced aviation base ship. To put it in plain words, she provides a completely self-contained portable airfield for the support and maintenance of SP2H's (P2V's). In her tank deck she carries 6x6 and 4x4 trucks, an aircraft crash truck,

THIS *CRUSADER* became 50,000th accident-free launch from *USS Bon Homme Richard* (CVA 31). Contrary to first belief of at least one reader, who has since sided with us, plane does have a pilot, and engine's air intake is uncovered.



avgas and avlube trucks, a bulldozer, jeeps, pickups, a carryall, aircraft starting units, auxiliary aircraft power supplies, a water buffalo, 15 trailer vans including a communication van with HF, SSB, VHF and UHF transceivers, an aerology van with weather forecasting capability, supply vans, repair vans, a library van for technical manuals, and an office van. All vans can be airlifted to operating areas if need be.

An AVB can set up and operate an airfield in an advanced zone, so the patrol planes will not have to fly long distances to a patrol area. *Tallahatchie County* can beach herself, offload the equipment, and have a base set up ready to receive the first aircraft within three hours. The ship carries spare parts and repairmen to make all minor and some major repairs on aircraft, and rockets, torpedoes, bombs and sonobuoys.

An unusual feature is that the ship has blackshoes, airdales and Seabees aboard as ship's company. She carries a crew of approximately 200 enlisted and 20 officers. Her type commander is COMNAVAIRLANT and her CO, XO and Ops officer are all aviators.

Talle County usually operates independently. However, when she is on advanced base operations, she provides support for Fleet units operating in her area by handling high priority cargo, mail and personnel. Transient personnel are messed and berthed aboard ship until arrangements can be made to send them on their journey, either home or back to sea. The ship has troop berthing for over 200 men besides ship's company.

In the Med, *Tallahatchie County* has visited or operated from the following ports: Rota, Naples, Suda Bay, Athens, Genoa, Villefranche, Catania, Nice, Beirut, Barcelona, Cannes, Rhodes, Cagliari and Piraeus. She has visited several of the ports more than once.

Now, how's that for a sea story?—James H. Kerr, RM2, USN.

• *We think its fine, and are much obliged for your contribution. We feel that every ship and unit has a story to tell and usually can tell it better than anyone else when motivated.*—ED.

Tailor-Made NavCads

SIR: There is an old saying, attributed to Confucius, to the effect that one picture is worth a thousand words. On page two of the May issue of ALL HANDS is a picture that I would venture to guess is worth a thousand prospective NavCads. It portrays a fledgling naval aviator being measured for a new suit of khakis.

The caption says "NavCad is fitted to uniform . . ." and sure enough, there is the tailor making a chalk mark on the poor lad's hand to show how much of the arm has to go before the sleeve length is right.

It makes me thankful that I received my uniform in the good old days when they marked the sleeves and then proceeded to cut them to fit the arm.—P. B. Kincade, LT, USN.

• *As we implied, NavCad training is no cinch, and this method of fitting uniforms shows just how tough a NavCad has to be to get through Pensacola.*

We used this picture because it was made early in the fitting, when the cadet was still in one piece. However, you will notice that some of the fingertips on his right hand do not show, which indicates he has already been fitted for his gloves.

There has been some loose talk of doing away with this tailoring system and perhaps your letter will help focus attention on its shortcomings.

Until now, the loudest complaints have come from cadets who had trouble keeping up with other runners on the obstacle course after having their legs cuffed to fit their trousers.

Sorry that we can't go into further details at the moment, but your letter caught us short-handed as well as red-faced. But thanks, anyway.—ED.



LOOKING SMART—Waves at Washington's Naval Security Station stand at attention as they are inspected by highest ranking Wave, CAPT V. B. Sanders.

HAVING A FIT—A tailor makes mark on NavCad's hand . . . to cut sleeve to fit arm or vice versa?



Waves Are Part of the Navy Family

SIR: If it's possible for the Marines' magazine to publish a two-page spread about women Marines in each issue, why can't ALL HANDS do this for the Waves? There are many more Waves than women Marines. I would think that with approximately 6000 enlisted women and 700 Wave officers on active duty in the Navy, a section devoted entirely to Waves is certainly called for.

The exclusive section about women Marines probably helps them feel they belong to the Corps.—D. M. P., YN2 (W), USN.

• *We do not publish a special column, or department, exclusively devoted to Wave activities for the same reason we do not publish special departments concerning the activities of Seabees, submariners or Carrier Air Groups—to cite only a few examples. We consider Waves to be an integral part of the Navy, just as are Seabees or submariners. To devote a regular special section of the magazine to the activities of any special group would, in our opinion, tend only to exclude them from the whole.*

We hope you have noticed, however, that much of the editorial content does apply directly to Waves in respect to matters of career interest. We also hope



OLD-TIMER—*USS Bass,* of post-WWI vintage, was given four designators in the course of her 20-year Navy career. They were V-2, SF-5, B-2 and SS-164.

you have noticed that Waves are frequently mentioned in connection with most naval activities—sports, recreation, career opportunities, advancement and promotion, again to cite only a few examples.

We have tipped our hat to all the Waves—editorially speaking—when in the July 1964 issue we devoted the inside back cover exclusively to photographs of the Waves to celebrate their 22nd birthday.

We are as happy to publish articles concerning individual activities of Waves as we are to publish individual activities of any other group. Drop us a line and tell us what your activity is doing, Wave-wise, that will be of interest to a large segment of the Navy. —ED.

Subs Had Punch in Old Days, Too

SIR: To amplify the letter on submarine guns (page 25 of the May issue), here is some information on large submarines of the pre-nuclear period with which some of your readers may not be familiar.

During World War I, the British designed three submarines in what they called the "M" Class. The guns were for shore bombardment and may have been intended for use against the German coastline.

The "M" Class subs carried a 12-inch gun forward of the conning tower which, according to the 1925 edition of *Jane's Fighting Ships,* was loaded while the submarine was surfaced.

The boat then dived to between 12 and 20 feet, leaving the muzzle of the gun a few inches above the surface. The gun was fired while running submerged, using the periscopes for sighting.

A three-inch gun and a light machine gun were carried for self defense.—R. H. Webber, LTJG, USNR.

• *Thanks for recalling to us this really remarkable hardware. We know your story is true because you say so and because of the photograph of the M-1 you sent along and which is reproduced herewith.*—ED.

Barracuda, Bass and Bonita

SIR: I recently met an old timer who was discharged from the Navy in 1934. We looked through some of his scrap books and ran across photos of three submarines marked V-1, V-2 and V-3.

He says the subs were renamed before or during World War II. Do you know anything about them? Also, were any of the three ever designed or converted into double-deck boats?—G. H. C., RM1, USN.

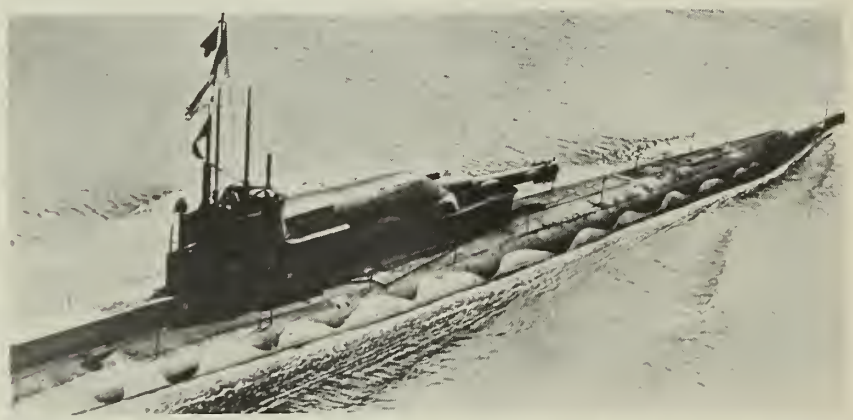
• *The three ships in question are fleet submarines constructed in the decade following World War I. They were commissioned as V1 (SF 4), V2 (SF 5) and V3 (SF 6).*

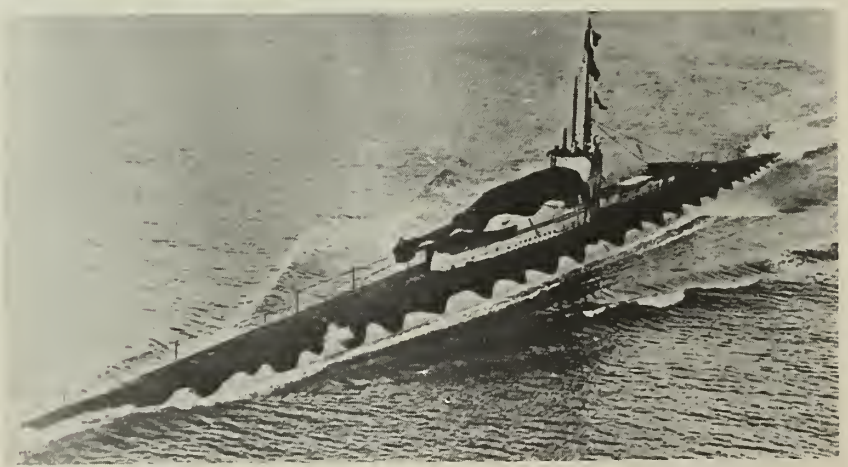
V1 and V3 each carried a 5-inch/51 caliber gun. V2 had a 3-inch/50. The rest of their armament was the same—six 21-inch torpedo tubes and two machine guns. They were single-deck boats designed for a complement of 56 (6 officers and 50 enlisted).

In 1931 the U. S. Navy reclassified its submarines. The fleet types, which were capable of long-range operations, were given the names of fish, and the shorter range S-boats, continued to be designated by number only.

V-1, V-2 and V-3, being fleet types, were given the names USS Barracuda,

BIG SHOTS—British 'M' class submarines designed during World War I had a 12-inch gun forward of conning tower to be used for shore bombardment.





Bass and Bonita (*in one, two, three order.) For several months they were known as B-1, B-2 and B-3 until their designations were changed to SS-163, SS-164 and SS-165. Nevertheless, submariners continued to call them V-boats.*

By 1937 all three subs had served in both the Atlantic and Pacific Fleets. In the middle of that year they reported to the Philadelphia Navy Yard where they were placed out of commission in reserve.

During the emergency period immediately preceding the bombing of Pearl Harbor, they were reactivated and added to the Atlantic Fleet. On 7 Dec 1941 all three were operating in the vicinity of the Canal Zone.

During the war, Barracuda *made six Pacific patrols and* Bonita *made several in both the Caribbean and the Pacific—but neither caught sight of the enemy.* Bass *didn't meet the enemy either, but was not as lucky as her sisters. On her fourth Atlantic patrol fire broke out in her after battery room and quickly spread into the torpedo compartment. The boat was not lost, but almost half of her crew were killed by asphyxiation.*

In late 1942 all three returned to the Philadelphia Navy Yard for conversion to cargo carriers—but not double-decked boats. After coming out of the yard they conducted training cruises off the eastern U. S. coast until March 1945. They then returned to Philadelphia where they were decommissioned and, shortly thereafter, stricken from the Navy list. —Ed.

Who Was Really First?

Sir: A rather simple question arose in our wardroom today and I was embarrassed to discover that I, as a Supply Officer, couldn't answer it. Perhaps you can help.

Who was the first admiral, per se, of the U. S. Navy Supply Corps? What was his date of rank—R. P. B., ENS, SC, USNR.

• *Granted, it's a simple little question but the answer . . . That's something else again. We'll give you the facts, as uncovered by a very aggressive and determined lieutenant in the Supply Corps to whom we turned for help, and you can decide for yourself.*

The first admiral to be Chief of the Bureau of Provisions and Clothing was Rear Admiral William Shubrick, who served in that position from 1844 to 1846. However, he was a line officer, so he's not the man you're looking for.

Perhaps a brief background discussion of the question of rank might be useful at this point.

Originally, staff officers of the Navy did not have rank as did line officers. They were addressed by profession rather than by rank—purser, for example.

In 1841, staff officers were given assimilated rank, and all pursers were accorded the privileges and benefits of lieutenants. In 1847, pursers were granted relative rank, with all pursers of more than 12 years in grade to rank with commanders, and those of less than 12 years with lieutenants.

This rank was, however, relative. Pursers were ranked with commanders or lieutenants without actually holding the rank of commander or lieutenant.

In 1860, the title "purser" was changed to "paymaster." In 1861, the grade of assistant paymaster was created. Two years later, Secretary of the Navy Gideon Welles (who, incidentally, had been Chief of the Bureau of Provisions and Clothing, 1846-49) established relative rank as follows: Paymasters after 15 years, with captains; paymasters after five years, with commanders; paymasters, first five years, with lieutenant commanders; assistant paymasters with masters.

In the same General Order in which he established this relative rank, Secretary Welles also stated that the chiefs of the various bureaus of the staff corps were to rank with commodores.

To return to our original theme: Paymaster Horatio Bridge, who had been commissioned a purser in 1838, was serving as Chief of the Bureau of Provisions and Clothing at the time (1854-69). Commodore Bridge could, we presume, be considered the first Supply Corps "admiral" if you want to push a point or so. However, your wardroom opposition will undoubtedly remind you that this title of commodore was a relative rank, not true rank, and it remained only as long as Paymaster Bridge retained the position of bureau chief. And they will be right.

The Personnel Act of 3 Mar 1899 included a proviso "that all sections of the revised statutes which, in defining rank or positions in the Navy, contain the words 'the relative rank of' are hereby amended to read 'the rank of,' but officers whose rank is so defined shall not be entitled by virtue of their rank to command in the line or in other staff corps."

At that time, Edwin Stewart was serving as Paymaster General and Chief, Bureau of Supplies and Accounts. (The Bureau of Provisions and Clothing had become the Bureau of Supplies and Accounts in 1892.)

Stewart had been Paymaster General since 1890, holding the relative rank of commodore. He became rear admiral on 3 Mar 1899. If you want to claim him as the first Supply Corps admiral, feel free.

But life is never quite that simple. In 1906, a further complication arose. By this time, there were several rear admirals in the Pay Corps on the retired list, and several others on active duty.

In 1906, two retired Pay Corps commodores, former chiefs of the Bureau of Provisions and Clothing—James Horatio Watmough, Paymaster General for several months in 1877, and Thomas Henry Looker, Paymaster General for several months in 1890—were promoted to the rank of rear admiral, to rank from 3 Mar 1871 (the date that they had originally been promoted to pay director).

These two men, therefore, had the earliest dates of rank of any Pay Corps rear admirals, being given exactly 28 years' precedence over Rear Admiral Stewart. So either of these two could be called the first Supply Corps admiral, if you felt so inclined.

Glad to clear up this little matter for you.—Ed.

• *There was one further small point. One section of the 1899 Personnel Act*



UP AND OUT—The nuclear powered submarine *USS Plunger* (SSN 595) heads to sea off coast of Oahu, Hawaii, with some of crew topside.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington, D. C. 20370, four months in advance.

• USS *West Virginia* (BB 48)—The 10th annual reunion will be held at the VFW Hall, Gardena, Calif., on 5 December. For information, write to R. A. Brown, c/o VFW Hall, 1822 West 162nd St., Gardena, Calif.

• USS *Salamaua* (CVE 96)—A reunion is planned for ship's company and squadrons which served on board. Write to CDR Charles T. Macdonald, USNR, 1125 Marlan Drive, Alexandria, Va., 22307.

• USS *Coral Sea/Anzio* (CVE 57)—A reunion is being planned in Oklahoma City in June 1965. For details, write to Courtney Spratlin, Winterville, Ga.

• USS *LCI(C) 466* and USS *LST 684*—A reunion is being planned, with time and place to be decided by mutual consent. Write to William M. Moldoff, P. O. Box 151, Nassau, N. Y. 12123.

• NAS *Akron, Ohio*—A reunion is being planned for all who served on board, or who were attached to the squadrons, from December 1947 to October 1957. For details, write to C. A. Cort, YNC, USNR, 924 Greenwood Ave., Akron, Ohio, 44320.

stated that nothing in the legislation was to "be construed as changing the titles of officers in the staff corps."

A paymaster with the rank of captain continued to be addressed as "paymaster." The title of rank was considered applicable only to line officers.

In 1918, Secretary of the Navy Josephus Daniels changed "Navy Regulations" directing that thereafter ". . . every officer in the Navy be designated and addressed by the title of his rank without any discrimination whatever."

At that time, the Paymaster General was Sam McGowan. Rear Admiral McGowan could therefore be considered the first "Supply Corps" admiral. However, this position is not really tenable because the term Supply Corps did not replace "Pay Corps" (which had been established in 1871) until 1919. At that time, however, he apparently fulfilled all the qualifications of your query, so we'll have to say that Rear Admiral McGowan was the first admiral of the Supply Corps.

After this, the question of date of rank should be relatively simple. Sam McGowan was appointed Paymaster General, Chief of the Bureau of Supplies and Accounts, with rank of rear admiral on 1 Jul 1914.

However, that was not his official *date of rank. Our indefatigable lieutenant, who is a good man to have on your side in any argument, points out that the "Register of Commissioned and Warrant Officers of the U. S. Navy and Marine Corps" lists him as commander with date of rank of 11 May 1906; as captain, with date of rank of 23 Sep 1915; and as rear admiral with date of rank of 29 Aug 1916. So there you are.*—ED.

Chase Field and New Iberia

SIR: In your article "The Making of a Naval Aviator" you stated the student pilot " . . . is then transferred to NAAS Kingsville or NAS Corpus Christi, for advanced training in jet aircraft." But you didn't mention either NAAS Chase Field Beeville, Texas, or NAAS New Iberia, La—G. S. C., JO1, USN.

• *Thanks for reminding us. We'll clarify the matter right now.*

NAAS Chase Field is the older; the training of Navy pilots had been underway for one month before its June 1943 commissioning. The first briefing spaces were blackboards set up under the sunny Texas skies.

For the remainder of World War II, Navy pilots continued training at Chase Field. Shortly after the war, the air station was decommissioned.

Six years passed; the Korean conflict had been under way for a year. With new jet aircraft entering the Advanced Training Command (CNAVANTRA), NAS Corpus Christi had become overburdened. Chase Field was chosen as a practice-landing airstrip.

Lengthening one of the runways to accommodate the new jets, the Navy recommissioned Chase Field in June 1953. Four years later the air station was chosen as the place to start training in swept-wing jet aircraft.

NAAS New Iberia wasn't commissioned until 1960. During her relatively short existence, she has accumulated over 70,000 accident-free flight hours.

In addition, over 825 student naval aviators (including 110 allied students from Argentina, Brazil, Chile, Indonesia, Italy and Mexico) have completed this training.

For those unfamiliar with CNAVANTRA, student pilots reporting to one of the four air stations already have had nine months of basic flight training with one-half day of classroom work and the other half flying.

When the student completes the course, he is designated a Naval Aviator and ordered to duty with the Fleet. —ED.



DECORATIONS & CITATIONS

DISTINGUISHED SERVICE MEDAL

"For exceptionolly meritorious service to the Government of the United Stotes in o duty of great responsibility . . ."

* RICKETTS, Claude V., ADM, USN, posthumously, for service as Vice Chief of Naval Operations from November 1961 to July 1964. ADM Ricketts displayed the finest sense of judgment, outstanding leadership, and a keen perception of the role of our Navy in international affairs. He was a leader in the development of the Multilateral Force concept, and pursued it with vigor, imagination, and tact. An initial result of his efforts is now evident in the mixed-manning demonstration being conducted by uss *Claude V. Ricketts*. ADM Ricketts was in the midst of all matters in which the Chief of Naval Operations was involved, both within the Navy and in joint matters. He was able to carry out these duties so ably because of his extensive background in all phases of naval operations—surface, subsurface, and air; and his equally great knowledge of international matters. His enlightened leadership, an outstanding example for all with whom he came in contact, was a source of inspiration to civilians and military alike.

LEGION OF MERIT

"For exceptionolly meritorious conduct in the performonce of outstonding service to the government of the United Stotes . . ."

* MARX, James H., CDR, SC, USN, for service from 2 Jan 1962 to 20 Apr 1964 while serving as Chief of the Emergency Supply Operations Center (ESOC), Supply Operations Directorate, Defense Supply Agency. During this period, CDR Marx displayed exceptional leadership and professional skill in the operation of the ESOC, and in the expeditious emergency logistical support of foreign governments, the armed services, and other federal agencies and organizations. His outstanding accomplishments, professional competence, and deep devotion to duty were in keeping with the highest traditions of the U. S. Naval Service.

* SCHADE, Arnold F., RADM, USN, for service from December 1963 to June 1964 as Commander Middle East Force.



Admirol Cloude V. Ricketts
Vice Chief of Naval Operations, 1961-1964

Exercising a high degree of leadership and resourcefulness, RADM Schade has been responsible for and has directly supervised the preparation and implementation of naval plans for exercises, contingencies, and the emergency evacuation of U. S. nationals from the Middle East, South Asia, and the east coast of Africa. During the period 26 November to about 6 Dec 1963, after complete planning and programing, he executed Operation Cho-Bahar, a joint U. S. Navy-Imperial Iranian Navy civic action project along the Gulf of Oman. His outstanding initiative in securing the cooperative efforts of Operation Handclasp, CARE, World Medical Research Foundation, and a University of Pennsylvania Medical team insured the successful completion of this humanitarian mission.

* WALES, George H., RADM, USN, for service as Director, Pan American Affairs, Naval Missions and Advisory Groups Division, Office of the Chief of Naval Operations, from June 1963 to June 1964. Exercising a high degree of diplomatic skill and resourcefulness, and utilizing his broad knowledge of the Latin American people and their problems, RADM Wales has significantly furthered the objectives of the United States by his outstanding performance as Navy Delegate, Inter-American Defense Board, and as Navy Member, Joint Brazil-United States Defense Commission, Joint Mexican-United States Defense Commission, and the Permanent Joint Board on Defense, Canada-United States.

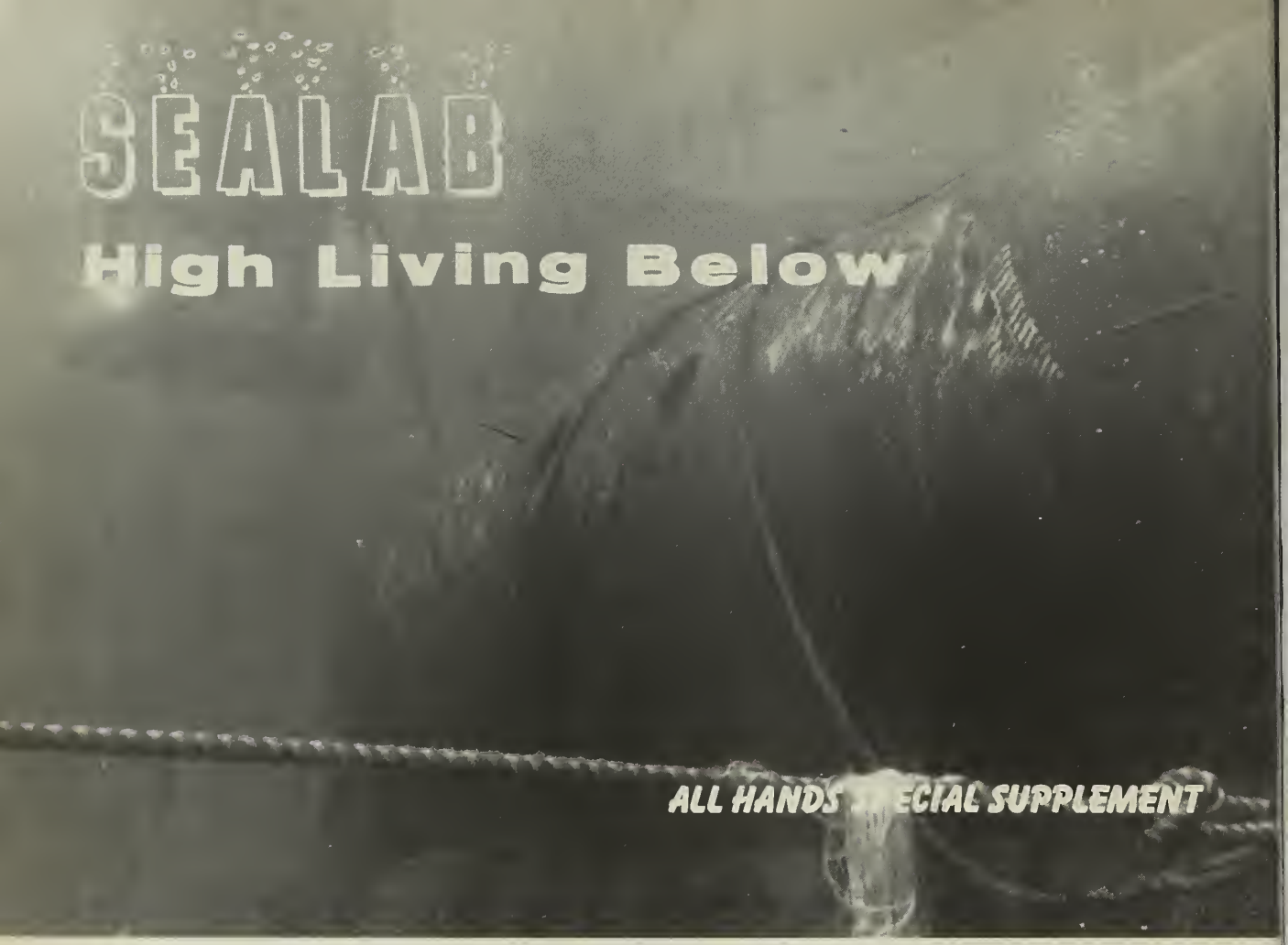
NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving octuol conflict with an enemy . . ."

* BRENNAN, William J., LTJG, USN, for heroism on the night of 1 Apr 1964 while serving on board uss *Holder* (DD 819), which was operating in a plane guard position astern *Randolph* (CVS 15) in waters approximately 270 miles southeast of Cape Henry, Va. Upon sighting a man who had been lost overboard from *Randolph*, and who appeared to be unconscious while floating in the heavy seas. LTJG Brennan immediately donned a lifesaving harness, dived overboard into the darkness and choppy waters, swam a distance of about 40 yards to the side of the victim, and managed to tow him back to *Holder*, where both men were hauled to safety.

* PHILLIPS, Joseph H., SN, USN, for heroism during the hours of darkness on the early morning of 25 Oct 1963, while en route from the U. S. Naval Air Station, Moffett Field, Calif., to his new command, uss *Alfred A. Cunningham* (DD 752). Observing a burning vehicle along the side of the highway, and almost simultaneously noticing a man lying on the pavement in a pool of flaming gasoline, Phillips left his vehicle and immediately went to the aid of the unconscious victim. Although his efforts to remove the man from the burning fuel were momentarily thwarted when a sudden flash of flames erupted directly in his face, he continued in his rescue attempts until the victim was dragged to safety. By his prompt, courageous and determined efforts in the face of grave personal risk, Phillips undoubtedly saved the life of the unconscious man.

★ SAPANZA, Protacio B., SK2, USN, for heroism on the night of 28 Dec 1963 while serving at the U. S. Naval Air Station, Glynco, Ga. Upon learning of a serious fire in a nearby residence, Sapanza rushed to the scene, forced his way into the flame- and smoke-ridden structure through a bedroom window and succeeded in rescuing a father and child, the former having been overcome by smoke while attempting to effect a rescue. By his outstanding courage, promptness, and perseverance in the face of grave personal risk, Sapanza was directly instrumental in preventing any loss of life in the fire.



THE TERM "aquanaut" has been added to our 20th century space vocabulary. An aquanaut is a spaceman who goes down instead of up, in the medium of water rather than the vacuum of outer space. His work is as dangerous, his mission as important and his accumulated knowledge as useful as that of his astronaut counterpart.

This space term is appropriate because the underwater world has come to be known as inner space.

Our penetration of the three-dimensional underwater world is at the beginning—comparable to the situation in regard to outer space. The Navy is intensifying its efforts in inner space, and wants to make it possible for men to live and work deep underwater for extended periods of time.

Without adequate preparation, the work could be exceedingly dangerous. It is important to our nation's defense because the sea beds and their surroundings could represent a strategic element in warfare. It is important to the Navy's underseas rescue units, which must be prepared to cope with emergency situations in an age when many Navymen spend lengthy periods living beneath the sea in nuclear-powered submarines.

Aquanauts, like other spacemen, are challenged by unprecedented physical and psychological rigors. However, laboratory and pressure chamber experiments have demonstrated the feasibility of establishing a manned underwater station. This work was highlighted by an experiment, called Genesis I, conducted at the Naval Medical Research Laboratory, New London, Conn., in which three men lived 12 days in a chamber simulating the pressure at 200 feet underwater.

THE NAVY'S first full-fledged aquanauts are four divers who recently spent 10 days living and working deep underwater as members of the Project Sealab I team, which conducted the first open sea phase of these long duration experiments in the Navy.

The original plan was for the men—LCDR Robert E. Thompson, MC, USN; Lester E. Anderson, GM1, USN; Robert A. Barth, QMC, USN; and Sanders W. Manning, HMC, USN—to remain submerged at 192 feet for three weeks, but after 10 days a tropical storm that threatened to become a hurricane forced them to surface.

The Sealab itself, which was lowered to the sea floor at a spot 26 miles off the coast of Bermuda, is constructed of three-quarter-inch steel, is 40 feet long and 10 feet in diameter. The lab and living space occupies 30 feet of the unit and the other 10 feet houses an electrical power transformer, gas manifold, and stowage areas for scuba gear and tools for underwater work.

The Sealab is equipped with electric lights, bunks, lavatory facilities, work bench, heaters, dehumidifiers, emergency water tanks, a fresh water shower, cooking facilities and a wide range of communication equipment plus a well equipped laboratory for physiological and marine biological studies.

It was lowered by filling two ballast bins, attached to its legs, with 72 tons of metal, then moored to its underwater position.

Nearby was the Navy oceanographic research tower Argus Island, a 260-foot-high structure that rises out of the Bermuda waters. This site was chosen because the ocean bottom is flat and visibility is good.

On the surface, the large covered lighter *YFNB-12* maintained a support post to supply electrical power, emergency gas, communications and fresh water. Except for these services the aquanauts maintained an autonomous existence.

An underwater "station," or combination work quarters and living accommodation on the ocean floor, could be of considerable importance in any work at great depths. With conventional diving methods, the greatest percentage of a diver's time in the water may be spent decompressing on the way up, allowing the gas absorbed by his body to be released gradually to avoid the bends. As a result, very little time is available for doing useful work.

The work of a diver who can live in an underwater base, with its atmosphere compressed to an amount equal to the water pressure outside, is quite different. He need decompress only once—when he finally surfaces after completing a job. Meanwhile, he can return to his underwater quarters after work each day, take a shower, cook his meals, read and relax and, after a good night's sleep and a hearty breakfast, return to the open sea to continue his work. Thus, he is not tied to a surface existence—he literally becomes a denizen of the deep.

While the aquanauts were free-swimming they used semi-closed-circuit scuba gear. The atmosphere in their quarters consisted of a helium, oxygen and nitrogen mixture under 86 pounds pressure per square inch. The men had no sensation of being under pressure.

Inside the lab the temperature was kept at 90 degrees—comfortable because of the increased heat conductivity of the artificial atmosphere. The only physical effect present to remind the diver they were in an alien environment was what is called the helium speech problem, which produces Donald Duck type speech.

The success with which Sealab I divers met while conducting this experiment is reflected somewhat in the daily reports from the surface support craft. They constitute a diary of the episode, which set the world's record as the longest time men have lived at such depth and under such pressure.

Tuesday, 21 Jul 1964

The four Navy aquanauts spent a quiet first evening in their underwater habitat. They had entered the Sealab for the first time late yesterday afternoon at 1735.

In the evening the aquanauts reported that, with the lights off, the interior of the Sealab is bathed in a soft blue light sufficient for reading and writing. However, they retired early last evening and they were asleep by 2115, except for the one team member who maintained the watch.

This morning at 0730 the aquanauts awakened and prepared their breakfast—consisting of corned beef on crackers washed down with hot coffee. At that time the team of aquanauts reported to the surface regarding their condition: "We are doing fine; it is nice and comfortable down here, and we could stay forever."

LCDR Roy Lanphear, USN, the project officer, made the following statement today at noon: "The Sealab has been on the bottom for 18 hours now. All atmospheric control and communication systems are in excellent order. The subjects are fine and in very good spirits."

After breakfast this morning, the team left their habitat for their first trip into the undersea world



EVENING WALK—Aquanaut 'walks' past undersea home.

SEA FOOD—Inside, 192' down, aquanauts enjoy meal.





HOOK UP—Sealab divers adjust the lab's supply line.

around Sealab. They report the visibility on the ocean floor is 190 feet. For the most part, their work this morning was restricted to observation, general cleaning-up inside the Sealab and marine biological studies. They are making sorties of short duration in the vicinity of the Argus Island base.

In their observation of marine life the team of aquanauts have already established a friendship with several large groupers. They will attempt to feed those fish late this afternoon.

The aquanauts are having a discussion as to whether it would be better to have tacos, tortillas or tamales for lunch.

GROUNDED—Navy's Sealab waits for a ride out to sea.



Wednesday 22 Jul 1964

The four aquanauts in the second day of Project Sealab are in very good spirits. They have completed their physiological and psychological orientation period for the day.

CAPT George F. Bond, MC, USN, senior medical officer, and CAPT Walter F. Mazzone, MSC, USN, technical project officer, report that they completed extensive medical examinations of the aquanauts last night before the divers retired.

This morning the aquanauts made several 45-minute sorties, completing a period of general orientation around the Sealab site. The aquanauts have become quite at home in the Sealab, even to the extent of becoming acquainted with the undersea creatures. Two large groupers have become very friendly and are easily distinguishable. One is a grey velvet color and has been named Wally; the other, with a black fin and tail, has been named George.

This afternoon the aquanauts will continue their observations of marine life and also begin their scheduled work program.

It is planned today that a working party of several divers will imbed ultrasonic beacons in the ocean floor. These beacons will be used by the aquanauts as direction finders.

Thursday 23 Jul 1964

After a good night's sleep, Aquanauts Anderson, Barth, Manning and Thompson awoke this morning at 0830 and had Mexican food for breakfast. After breakfast the team set about drawing blood samples and recording other physiological data.

Lunch today in the Sealab was served at 1230, after which aquanauts took a one-hour nap. It was noted by CAPT Bond that the Sealab crew becomes very sleepy after meals. After the siesta, the aquanauts began the afternoon routine. A sortie from the undersea habitat is just beginning.

Late yesterday afternoon the aquanauts looked toward the surface and noted that all their usual neighbors in the fish community were in a frantic dive down to the Sealab. The reason was clearly evident when two 10-feet-long sharks appeared. The sharks thoroughly upset the tranquility around Sealab during their five-minute visit. Once departed, the sharks did not return.

A trolley car service. similar to a dumbwaiter affair, has now been established from the surface to the Sealab for use in rapid transfer of material. This eliminates the necessity of sending a diver-messenger to perform a routine task.

When the afternoon sortie is completed, about 1600, the aquanauts will return to the Sealab, record their body temperatures and take hot showers. An early evening meal is planned, with a one-hour rest period immediately afterward. After more psychological and physiological testing, the aquanauts should retire about 2100.

Dr. Bond noted that "The aquanauts are responding typically to the conditions under which they are living. They move slower than normal and they do not like

to be rushed. It seems as if they are making every effort to conserve their energy."

Friday 24 Jul 1964

This morning the aquanauts were awakened at 0900. Aquanaut Anderson had a hearty breakfast of hot chocolate, tomato soup and crackers; the other Sealab members were content with hot chocolate and coffee.

At 0930 Aquanaut Barth was operating a portable underwater television camera. He sent the following message topside over the electro-writer communications system: "Tell the boys in the mess deck to turn on their TV. I will give them a tour outside."

Blood samples were taken at 1000 and shortly afterward the aquanauts began preparing for the morning sortie, which was confined to the near vicinity of the Sealab. Wally, the grouper, came by at 1045 for his morning handout. Wally is very fond of sardines.

An afternoon sortie is planned to the northeast of Sealab. It will be an exploring expedition and will take the aquanauts about 75 yards from their habitat.

Saturday 25 Jul 1964

Last night was a late one for the aquanauts. They were involved in making motion pictures and conducting long technical discussions with topside personnel. They did not retire until 2300.

All conditions were completely normal this morning when the aquanauts awoke at 0900. They all slept well, and during the night the watch standers were able to make good observations of the marine life around the Sealab.

Early this morning the physical examinations and physiological testing were completed. Afterwards, Aquanaut Barth made a sortie of 75 minutes to feed the fish. He carried an underwater television camera so that topside personnel on *YFNB 12* could watch the show on their monitor. Kinescope recordings were made of the entire process.

After lunch and a one-hour nap the aquanauts will make their afternoon sortie. Today they plan to implant some Secchi-discs which are oceanographic devices used to measure underwater visibility.

Yesterday the aquanauts installed a current meter on the ocean bottom, which took them 30 minutes. In addition, they have been assisting photographers who are diving to make a pictorial record of the Sealab operation.

Tonight the aquanauts will rig large spotlights around and above Sealab to help illuminate the undersea habitat for night-time photography.

Yesterday the aquanauts received two surprises in the way of food—fresh watermelon and homemade chocolate fudge.

When asked about the general physical condition of the aquanauts, CAPT Mazzone reported: "All results of the physiological testing demonstrate no significant changes from those normally expected."

Sunday 26 Jul 1964

As of this time, the U. S. Navy four-man aquanaut team has been living on the ocean bottom for 144 hours. An early morning conversation with Aquanaut Thompson indicated that all conditions were normal. The other aquanauts were still asleep when this conversation between the Sealab and operations control took place at 0700. Aquanaut Thompson, the medical officer, had the early morning watch and decided to prepare breakfast. He took care not to awaken his team members as he prepared corned-beef hash on toast with a steaming cup of hot chocolate.



ON THE JOB—Biological samples are part of the work.

After breakfast, Thompson continued his conversation with the Sealab operational control on the surface. He spoke of trying to catch a trumpet fish and how elusive they are. Apparently the trumpet fish will allow you to believe that you have captured him; then, just as your grip tightens, he scoots away. Also, he told of lowering the thermometer down into the water to record the temperature outside the Sealab. As he did so the groupers, who are now steady companions of the aquanauts, mistook it for a handout of sardines and made strikes at it.

Today was the first Sunday for the men in the Sealab.

AT HOME—Aquanauts relax and compile research data.





DOWN SHE GOES—Sealab is towed past Argus Island and lowered to ocean floor in clear water off Bermuda.

After the other team members awoke and had breakfast, the underwater habitat became an underwater chapel. At 1030 Aquanaut Thompson announced to operational control that church services were beginning. After a moment of silent prayer. Dr. Thompson led the other aquanauts in an open prayer expressing their thankfulness to God for watching over them, for the friends that they have made of the underseas creatures, and asked that "The Lord take care of those who take care of us. "The service was concluded with the singing of "Onward Christian Soldiers," accompanied by Aquanaut Thompson on the harmonica.

Later, while the aquanauts were having lunch, march music including "The Stars and Stripes Forever" was broadcast into the Sealab. They all enjoyed the short interlude, especially Aquanaut Anderson, who immediately began waving his arms as a conductor in tempo with the music.

Even with the rolling seas, which were heavier than those of the past few days, Sunday—both topside and in the Sealab on the ocean bottom—was bright, sunny and peaceful.

Monday 27 Jul 1964

At 1735 the Navy four-man aquanaut team will mark their first week of residence in Sealab I at a depth of 192 feet. It has been a highly successful seven days, and it represents the longest period of time man has remained submerged, at this depth, under similar conditions. The aquanauts remain cheerful and content in their surroundings.

Yesterday afternoon was devoted to minor housekeeping chores and the daily physiological testing. Several brief sorties were made in the vicinity of the Sealab, mainly for photographic purposes. Otherwise, the aquanauts spent a quiet Sunday afternoon and evening. Dinner last night consisted of spanish rice, tamales, tomatoes, chili and beans. Fresh watermelon was sent down from the surface for dessert.

This morning, Aquanaut Manning had the early watch while the other team members slept. Manning reported: "I feel very well. Everything is going fine. I slept well last night. As a matter of fact, I always sleep well." CAPT Bond and Aquanaut Manning had a long conversation this morning concerning weather and sea conditions. They also discussed today's operations and logistic requirements.

The aquanauts will make visual observations and take photographs of the experimental one-man submarine, *Star 1*, while the craft undergoes a test dive this morning.

Tuesday 28 Jul 1964

At this time Project Sealab I enters its eighth day of operations and all systems are functioning in good order. Today the principal investigator, CAPT Bond, was preparing the four Navy aquanauts to begin a series of shark experiments.

The shark experiments were arranged by Dr. Bond in cooperation with the University of Miami. The aquanauts, working with the university scientists topside, will use a system of colored lights and acoustic devices for the experiment. The Sealab project offers an excellent opportunity for the study of shark behavior. It offers the scientists an opportunity to study the sharks at close quarters, in their natural habitat, and to make a photographic record of the study.

Yesterday's program completed the successful testing of the experimental one-man submarine, *Star 1*. That evening the aquanauts held a gala celebration in honor of the experiment and in honor of their first week at the bottom of the sea.

However, there is little time for rest and relaxation for the aquanauts. This morning the men concluded a battery of medical tests to determine their condition after a week of living under the intense pressure of great depth. To all indications their health and spirits are excellent.

This afternoon, in spite of the rainy surface weather, the aquanauts will install the electronic equipment to be used in the shark experiment. If time permits, they will install a telephone system linking their Sealab with shore-based systems.

Wednesday 29 Jul 1964

The accomplishments of the aquanauts thus far have been remarkable. Their physical condition and morale continue to be excellent.

Late yesterday afternoon a short-wave radio was installed in the Sealab and a marine band linkage was established through Washington, D. C., which enabled the aquanauts to talk to people in the United States. The first contact was with a ham operator in Savannah, Ga. The gentleman in Savannah found it difficult to believe the transmission he was receiving came from a station 192 feet beneath the surface of the ocean. After the initial contact the aquanauts spoke with other ham operators in Ohio and South Carolina.

Today at 1130 the aquanauts held a radio conversa-

tion with Rear Admiral John K. Leydon, USN, Chief of Naval Research in Washington. Admiral Leydon offered his congratulations to each of the aquanauts for the progress they had made thus far and wished them well during the remainder of their underwater operation.

The aquanauts made extensive sorties outside the Sealab yesterday afternoon, mainly in connection with the installation of acoustic devices and the colored light system which were used in the shark attraction experiment. The underwater television camera was positioned at a vantage point so any sharks coming into the area could be observed on the surface. The shark attraction system was turned on last night for several hours but no sharks appeared. Today the system will be reactivated in an attempt to attract sharks and induce them into a state of feeding frenzy.

The aquanauts will be free from danger as they observe the action through the porthole in the Sealab or from the heavily screened-in portion under the habitat called the back porch.

Thursday 30 Jul 1964

Yesterday afternoon the four-man team of aquanauts began their return trip to the surface. Anticipating bad weather at the site during the next 24 hours, the operational commander, LCDR Lanphear, made the decision to bring them up.

The slow process of decompression could take as long as 96 hours. By midnight tonight the Sealab and her crew should reach the 100-foot level and by noon tomorrow they should be at 60 feet.

All systems in the Sealab are working in perfect order. The progress during the upward journey is being monitored by underwater television cameras both inside and outside the lab.

This morning the Governor of Bermuda, Lord Martonmere, paid a visit to the site. He visited aboard *YFNB 12* and the Argus Island tower, and received a briefing on the operation.

At 1440 today the submersible decompression chamber with the four Navy aquanauts inside was raised to the cargo deck of Argus Island; the aquanauts are in excellent condition. Tomorrow morning the chamber will be opened and the aquanauts will once again breathe fresh air and return to a world perhaps a little unfamiliar to them after their 10-day underwater experience.

THE ASCENT which began the afternoon of 30 July did not follow the original planned procedure—which was for the aquanuts to remain in the Sealab until they reached the 15-foot level. Due to heavy seas the aquanauts transferred from Sealab to a submersible decompression chamber at the 81-foot level, from where they were hauled out of the sea by Argus Island's crane. They completed their decompression time high and dry after spending 36 hours in the process.

Not mentioned in the released daily report was an incident resulting in near-tragedy for Aquanaut Sanders Manning. While photographing the experiments of *Star 1* on the fifth day, Manning's breathing apparatus stopped operating properly.

He began making his way back to the lab but blacked out before he reached the entrance. Aquanaut Anderson, maintaining the watch inside, heard a thud as Manning was washed against the side of the lab.



WATER WORK—Sealab diver secures the entrance hatch.

He investigated and, finding Manning, he pulled him into the lab and revived him. Except for badly bloodshot eyes caused by the lack of oxygen, Manning was in good shape.

Vast amounts of physiological and technological data have been systematically accumulated during project Sealab I. This information itself makes the project a success, not considering that all records were broken for living and working within the sea at great depths.

Project Sealab I has shown man's potential for conquering inner space, but it is only a beginning. In the future greater depths, longer duration, and increased work loads will be programed.

ON THE BOTTOM—Aquanaut enters back porch of lab.



TAFFRAIL TALK

LIKE LINEMEN on a football team, some members of a magazine staff perform the most essential work while gaining little recognition for their labors. Able T. Register—we call him Bud—who joined ALL HANDS as a JO2, falls into this category.

During his stint here Bud performed invaluable service to our layout department. He was, like the lineman, sometimes brilliant, sometimes inspiring, and always dependable. Between pica counts and paste-ups Bud managed, among other things, to prepare several by-lined articles and make chief journalist. As he departs for a tour with the submarine service in New London, Conn., we reflect that Chief Register's greatest asset is that he is Able—in more ways than one.

Picking up where Bud left off is another staff newcomer, Kelly Gilbert, JO2, who learned his journalism at Iowa University—near his home at Des Moines—and gained most of his three-year Navy journalism experience on staff duty at COMCRUDESPAC, San Diego. Kelly is a sports-minded mid-westerner who can spin a yarn, run a TV camera, write a radio program, edit a newspaper or do just about anything else you ask of him.

★ ★ ★

In the way of passing on some useful information, we have condensed a message by CAPT Whitney Wright, USN, CO of USS *Midway* (CVA 41), addressed to his crew. It is self-explanatory:

It's easy to figure out things you don't like about the Navy because for some reason, it is easier to complain than praise, gripe than cheer and dislike rather than like. But if you first analyze what you *like* you may develop a different outlook.

What is there to like? There are as many answers to this as there are Navymen. To name a few, I myself like the bunch of guys I work with; I like flying; I like seeing different parts of the world; I like my job—which has a meaning; I find the Navy is more all-around fun than my previous job on the outside: I like the sea; and I like the excitement.

Now, what do you like? If you say you don't like anything about the Navy, then chances are you won't like anything about civilian life either. If you find it easier to approach the question from the negative side, then let's examine for a moment:

You don't like the pay? Remember, if you make Chief by the time your 20 is up you have a pension worth upwards of $65,000 or more.

You want to get out to finish your education? The Navy offers all kinds of opportunities to get high school diplomas, college degrees and postgraduate degrees— it is simply up to you to take advantage of what's offered.

You don't like being captain of the head for three months? There are worse jobs on the outside, but menial tasks can be stepping stones to greater things for people with ambition.

Your girl friend doesn't like the Navy? There are lots of girls—shop around (provided you are still single) if that is the *only* fault you find.

You think advancement is too slow? Not if you study and beat the other guy.

You don't like dehydrated cabbage? Don't take any on the mess line.

You don't like your CO? Stick around. The turnover rate of skippers is greater than the enlisted turnover.

We think the captain has a good point.

The All Hands Staff

The United States Navy
Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day lags), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D.C. 20370.

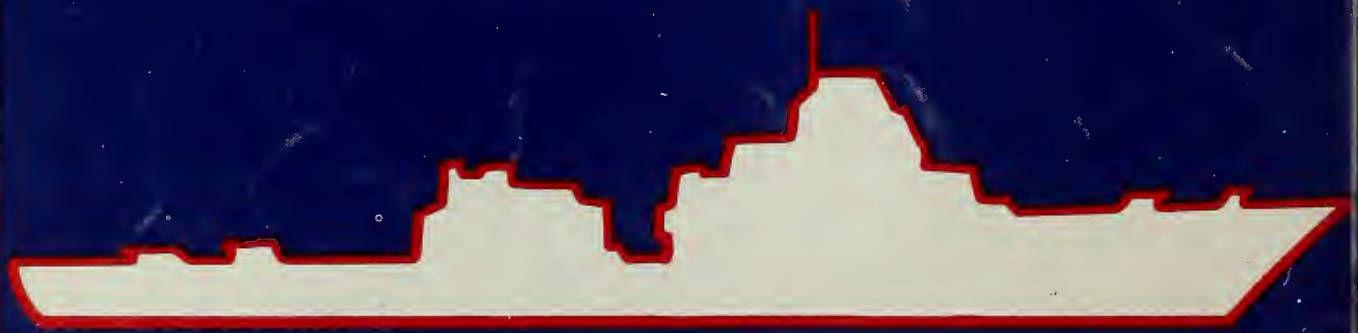
• AT RIGHT: STERN BUSINESS—Propellers swing high as Atlantic Fleet destroyer tender *USS Yellowstone* (AD 27) goes about the business of changing screws on one of her brood in port at Mayport, Florida.



Reading is the Key

- TO EXPLORING ATHENS, HONG KONG OR SAN JUAN WITH THE SKILL OF A WORLD TRAVELER (For more interesting shore leave, check with Clark, *All the Best in the Mediterranean*, Olsen's *Orient Guide* or Fodor's *Guide to the Caribbean*)
- TO MAKING THE MOST OF A GOOD HAND—OR A MEDIOCRE ONE (There's good advice in Roddy, *Friday Night Poker*, but first double check the odds in Adler, *Probability and Statistics for Everyman*)
- TO FINDING OUT WHAT MAKES YOU AND OTHERS TICK (For a look at 20th Century man, study Berelson's, *Human Behavior*)
- TO DISCOVERING THE WONDERS OF THE DEEP (Submerge with Cousteau, *Living Sea* or Idyll's *Abyss: Deep Sea and Creatures Who Live in It*)
- TO SPEAKING THE LANGUAGE ALMOST LIKE A NATIVE, IN ANY PORT (*Learn* from Pei, *Talking Your Way around the World*, and the "Getting Along" language series)
- TO TAKING A TURN AT BAT WITH A MAJOR LEAGUER (Out to the ball game in Stan Musial's *The Man's Own Story* or *Pennant Race* by Jim Brosnan)
- TO UNDERSTANDING THE TRADITIONS OF THE NAVY (Take Pride in the reports of Merrill, *Quarter Deck and Fo'c's'le*, or Morison *Two Ocean War*)

READING IS THE KEY TO ALL THIS AND A LOT MORE.



Visit Your Naval Library

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

12

Special Issue : SAFETY AND SURVIVAL AT SEA



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NOVEMBER 1964



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The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

NOVEMBER 1964 Nav-Pers-O NUMBER 574

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The Deputy Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistant Chief for Morale Services

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• **FRONT COVER:** LIFE AT SEA can became hazardous at times, but by following shipboard safety rules, risks and dangers are greatly reduced. Here, a sharp-eyed lookout mans his post topside on a destroyer during man overboard operations. Photo is from an award-winning Navy training film on rescue at sea.

• **AT LEFT:** ROUGH GOING—Heavy seas toss ships as they refuel while underway, adding complications to a complicated job. Wearing lifejackets, hard hats and safety lines are among the safety rules in use at such times.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.



FLIGHT DECK—Fueling aircraft is dangerous if safety rules aren't followed.

How High is Your

SAFETY LECTURES are for the birds —right?

Some of us feel that way. Then we see a droopy-eyed bird smoking in the next rack, and wish someone would give him a safety lecture.

It is important to donate some time to thinking about safety. When everything is going well—that's the time for each of us to check, and improve, our SQ—"safety quotient."

One good reason is that it's too late to start thinking safety-wise after our bird friend has set the compartment ablaze. Then we need to apply our knowledge of damage control—but that's another subject. Let's just consider some basic shipboard safety procedures here.

As individuals, we develop habits in our everyday life that eventually form a pattern. We might habitually do things the "right" way—or just the opposite. Even some men who ordinarily do things the right way slip now and then. So, if you don't know what safety procedures to follow for a particular job, you should learn them. If you think you do know, it is still good to brush up now and then. It might save your life!

On board ship it is necessary to observe safety rules in almost every undertaking. Everywhere about you are potential hazards. Deck machinery is impartial as to whom it mangles if mis-operated. Toxic fumes are indifferent to whom they might poison. Flammable mixtures get a kick out of burning, bright and hot—that's how they assert themselves — and they don't care where or when they burn. Even the topside life line couldn't care less who topples over it at night—it will be relieved of the weight of whoever was sitting or leaning on it.

TWO OTHER overriding factors must be considered. Many men live and work close together on board ship. Consequently, an accident, even in a confined area, can have disastrous results for many men—and it can happen in a matter of seconds. Each man must accept the responsibility of protecting the safety of his shipmates the same way he would want them to protect his well-being.

Also, no matter how seaworthy your ship may be, it can be rendered helpless when pitted against the forces of the open sea in an emergency situation. It can go down. An explosion in the right place, an uncontrollable fire, and next thing you know you're shaking hands with Davy himself.

Following is a review of some safety precautions which should be taken in some areas. We emphasize the *some*. These are by no means meant to cover the spectrum of shipboard safety rules, nor are they listed in any particular sequence of importance. *All of them are important.*

If you think this is old hat, that with your experience there is probably little or nothing we could mention that you are not familiar with, you may be right. We hope so. But we suggest you review this section, refresh your mind on the subject—then help remind others when they become forgetful. The safe way is not always what may appear to be the commonsense way.

Life Lines

Number one rule: Never sit or lean on the ship's life lines.

When life lines are removed for an extended period, emergency lines must be rigged.

When your ship is maneuvering alongside a dock, or during drills or evolutions, keep clear of life lines.

At sea, and in port under hazardous conditions of sea and weather, don't work over the side without a life jacket with a safety line attached. The line must be tended by another person on deck. If you have occasion to work outboard life lines in rigging or unrigging a brow, boat or other gear, or in ships' boats any part of which are outboard life lines, wear a life jacket.

Use a life line and safety belt when working on a boatswain's chair. The manila or sisal for your life line must be at least ⅝ inch in diameter.

Don't attach your life line to suspended staging; secure it at a rigid point. The reason for this is obvious.

When in port or when working over the side, make sure life buoys with a line attached are available.

A welding operator who must enter a confined space through a hatch should use a life line. He should use a safety belt and life line attached to his body in such a way that he cannot be jammed in a small exit opening.

Hatches

Never block access through doors, scuttles and hatches without permission from the department head responsible for them. When permission is granted to block off an access, do it in such a way that free access can be regained in a minimum amount of time.

See that broken, split or ill-fitting hatch boards are discarded or repaired at once. All hatch boards and fore-and-aft and athwartship beams should, insofar as they are not interchangeable, be kept plainly marked to indicate the deck and hatch to which they belong and their position therein.

When hatches are open, be sure that they are secured open. The regular prop or catch provided

SQ?

should be used. When work is being done through an opening of one section of a hatch, pin or lock the remaining beams to prevent their falling.

Place suitable guards near all open hatches, cargo working areas or other open spaces.

Rig safety lines around the cargo hatch openings when cargo is not being worked. Do not draw tarpaulins across hatches unless the hatch boards are in place, except for temporary periods during rough weather.

Inspect armored hatches fitted with balance weights and springs before closing to insure that such fittings are properly installed and operative. No device that impairs the free functioning of the dogging-down mechanism should be used.

Ladders

Don't race down ladders at breakneck speed. Use the hand rails. That's what they're there for.

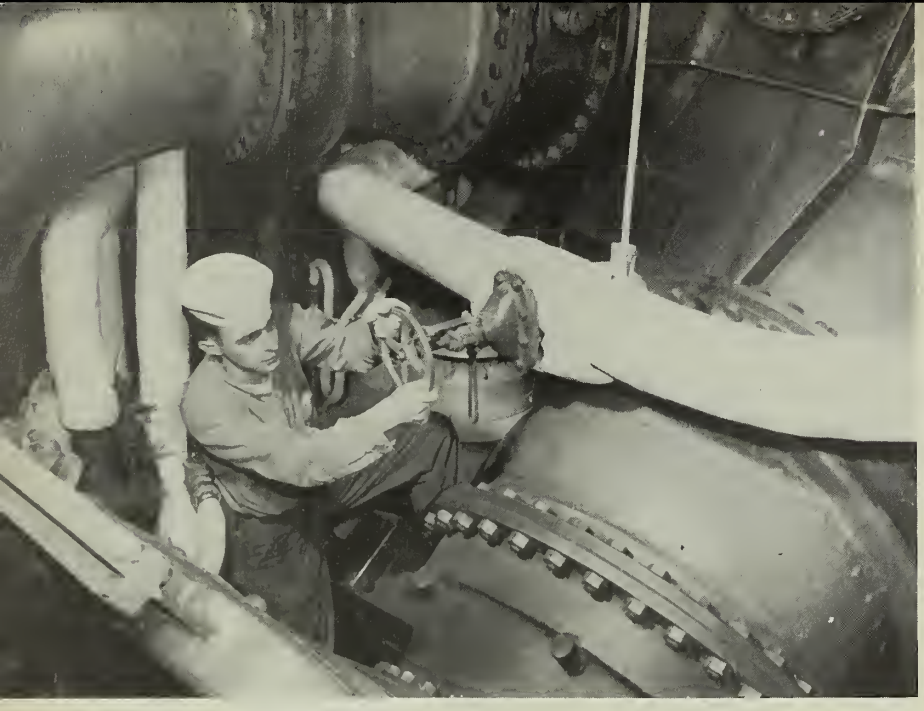
Ladders are not storehouses. Keep them uncluttered.

Don't unship ladders without permission from the department head in charge. Ladders can be bad luck.



GOOD RULES—Shipboard safety rules are designed to make life at sea as safe as possible. Below: Life lines and safety belt are a must in a boatswain's chair.





PLAY IT SAFE—Follow all safety rules when working in the engine rooms.

Perform work on ladders during hours of least traffic.

Proper Ventilation

Test the atmosphere of a compartment that has been sealed off, or which is normally kept closed, before entering. Some ships carry carbon monoxide indicators—if your ship has one, use it.

If vapor-producing materials are stored in the compartment, first test the atmosphere for the presence of explosive vapors (with a combustible gas indicator).

Use a flame safety lamp to determine whether the oxygen in the atmosphere is sufficient to support life.

If any dangerous condition is detected by the tests, ventilate the compartment. A satisfactory test must be made before anyone may enter or stay in the area.

If possible sample atmosphere without entering the compartment, otherwise attach a safety line to your body and have it tended by a responsible person outside and wear an OBA or air-supplied mask.

If your ship is not supplied with carbon monoxide indicators, carry out ventilation immediately after the flammable vapor test, if it has been determined that no explosive vapors are present. Use the portable ventilator set, and ventilate the closed space until there have been at least two complete changes of air. Then use the flame safety lamp to determine whether the oxygen content is sufficient to support life. If the test shows insufficient oxygen, ventilate until a satisfactory test is made. Continue tests even after men have entered the compartment.

Firerooms: Never work in a dead fireroom unless adequate ventilation is provided. If the boilers in a dead fireroom are connected to a hot stack, be especially certain to ventilate before entering the fireroom.

Boilers: As a protection against toxic or explosive gases, ventilate boiler settings completely and test for the presence of toxic or explosive gases before permitting anyone to enter.

Vapors and gases: Take every precaution to prevent excessive contamination of the air by solvent vapors. Make certain you and others under you know the dangers and hazards of vapors, gases, solvents and acids when required to work with or around them.

Painting inside: Forced draft ventilation should be in use when scaling, brush painting, spraying and using paint removers in an enclosed space and air-supplied respirators should be worn.

Using torches: A torch should not be used in a small unventilated space. It may heat up and thus become a source of danger, and it may exhaust the supply of oxygen. When such use is unavoidable, it may be necessary to use an independent oxygen supply and face mask.

Welding: Under conditions of improper ventilation, welding operations may create health hazards. These hazards are mostly due to one of the following:

- The presence of gases, dusts and fumes containing lead, zinc, cadmium and fluorine, or their compounds.
- The possible formation of oxides of nitrogen.
- Extreme heat.

During welding of uncoated ferrous metals in confined spaces, when individual ventilation devices are not available, some form of ventilating device should be installed.

Storing compressed gases: Compressed gases aboard all vessels, except cargo vessels, must be stowed only in designated compartments. Compartments containing compressed gases should be ventilated for 15 minutes before entry, if ventilation has been closed down.

Storage batteries: Be sure to ventilate a battery compartment which has been sealed off before turning on the lights, making or breaking electrical connections, or performing any type of work in the compartment. Make certain the ventilating apparatus of a battery compartment is operating properly before starting a charge. Stop the charge if ventilation is interrupted, except in an emergency. Do not resume the charge until the ventilation has been restored. Avoid sparks when removing or replacing batteries in compartments which may contain fumes. Use only tools with insulated handles for removing and replacing batteries. When using batteries with one terminal grounded, disconnect the grounded terminal before removing the battery and do not reconnect it until the battery has been replaced.

Bilges: The presence of fuel in the

IN HIGHLINE transfer at sea all lines must be tended by hand and sufficient men should be kept standing by.



bilges or in a free state in a boat is dangerous, since the fumes can be ignited easily. The free fuel may come from leaks in the fuel lines or units of the system, or may result from filling the fuel tanks too full. Fuel may flow through the vent holes because of the motion of the boat, or may run out because of the expansion of the liquid as it becomes warm. These fuel fumes must be disposed of by proper ventilation.

Power boats: Before starting an engine after fueling, or before starting when the engine has been idle for a day or more, take every precaution to ensure thorough ventilation. The same precautions should be taken if gasoline vapor is noticed when the boat is underway. Gasoline fires have occurred through ignition by sparks from some part of the electrical equipment while the engine was turning over; therefore, it is necessary to the safety of both personnel and material to stop the boat and clear out the gasoline vapors before continuing to run the engine.

Paint Fumes

The use of paints, varnishes, lacquers, cleaners, solvents and other finishing materials involves a marked fire hazard. Liquids containing volatile flammable vapors, if not cared for by adequate ventilation, may form explosive vapors.

Vapors and gases from cleaners, solvents and paints frequently have a harmful effect on the human system.

When a torch is used for paint removal, be careful not to ignite any flammable materials in the vicinity.

Containers holding paints, varnishes, lacquers, removers, thinners, cleaners or any volatile solvents must be kept tightly closed when not in actual use. They should be stored only in the paint locker.

Disconnect electrical equipment in enclosed spaces which are being painted.

Toxic Conditions

Petroleum vapors: Breathing the vapors from petroleum and gasoline products gives effects ranging from mild exhilaration, through irritation of the eyes, severe headache and complete intoxication, to unconsciousness and death. The effects become more pronounced as the percentage of concentration and time of exposure is increased. An added danger is that of accidents resulting from dizziness induced by small concentrations not otherwise harmful.



ELECTRICAL HAZARDS—Only qualified men should work on electrical gear.

The first symptoms of exposure to toxic vapors are headache, nausea and dizziness. If you note such symptoms, take them as a warning of the presence of dangerous amounts of vapors in the air. You can recover from these early symptoms promptly in fresh air. However, if anyone is overcome by vapors, he should receive immediate medical attention.

Compressed gases and cylinders: Particular attention should be given to location of cylinder stowage. Fumes from leaking cylinders might enter ventilating air intakes, and be transmitted to spaces where personnel may be affected or flammable gases may cause explosions. Chlorine and ammonia are toxic and will produce fatal results if breathed in large quantities. In small quantities, they are irritants and cause acute distress by attacking the tissues of the lungs.

Aerosol insecticide and carboxide are toxic, where concentrations are present. Freon, in the presence of fire or red-hot metal, will decompose into phosgene gas, which is toxic.

The following refrigerants are toxic in that they can cause death or serious injury, depending upon concentration and duration of exposure or inhalation: sulfur dioxide, ammonia, methyl formate, methyl chloride, ethyl chloride, methylene chloride and dichloroethylene.

KNOTS—Learn how to tie knots properly and remember—always use the knot that was designed to do the job.



Electrical Hazards

When working on live circuits be as careful to avoid contact with low voltages as with high voltages. Work on live circuits should not be undertaken alone.

Never take a shock intentionally from any voltage. This is dangerous practice. Whenever it becomes necessary to check a circuit to see that it is alive, a voltage tester, voltmeter or other indicating device should be used.

Keep a safe distance from any high voltage electrical circuit except when working on the circuit or equipment.

When painting or doing other non-electrical work near exposed parts of electrical or electronic equipment, have the electrician provide a suitable insulating barrier between the equipment and the work area.

Do not use gasoline, benzene, ether or similar flammable cleaning



UP & DOWN—Always travel at a safe speed when using your ship's ladders.

fluids on electrical apparatus. Do not use alcohol for cleaning electrical equipment as it damages most types of insulating varnishes.

Keep electrical equipment clean. Oil, grease and carbon dust can become ignited by electrical arcing.

Only qualified electricians should attempt work on electrical equipment and systems.

Do not use naked lights in an open boiler. Portable electric lights may be used, but hand electric flashlights are preferable. If portable electric lights are used, the bulbs must be adequately covered with wire or rubber guards. The electric leads must be thoroughly insulated.

When electric arc welding in a confined space is to be suspended for any substantial period of time, such as during lunch or overnight, remove all electrodes from the holders. Disconnect welding equipment from the power source.

Do not use electrical equipment or machines with frayed or otherwise deteriorated insulation.

Ground electrically driven portable machinery and fixed electrical equipment.

Flight Deck

Don't smoke or permit open flames within 50 feet of parked aircraft.

Stay clear of propellers, intake and exhaust ducts of jet engines.

Allow sufficient time to permit cooling of jet engines before inspection or work on them.

Wear protective clothing when working with contaminated parts (such as inside jet engines).

Make sure aircraft is properly secured with approved chocks, tiedowns or other approved securing means. Remove chocks with utmost caution when engines are in operation—at the proper signal. Make approach for removal of chocks from a safe direction, with due regard for the location of propellers and jet intakes and exhausts.

Only a qualified operator should be in pilot's seat when aircraft engines are started.

A fire guard must be stationed strategically near aircraft before starting engines.

Make sure correct signals are exchanged between pilot and person observing the engine from outside when starting aircraft.

Only authorized personnel should move any aircraft with towing equipment.

Do not tow aircraft without presence of wingwalker, when towing near obstructions. At night, wingwalker should carry a flashlight or luminescent wand.

Wash all accidental spills of aircraft fuel immediately. Avoid getting aircraft fuel on skin, as it may cause dermatitis and poisoning.

There should be no electrical equipment in the aircraft energized or being worked on, and no electrical apparatus supplied by outside power (such as electrical cords, droplights or floodlights) in or near the plane when refueling. For night refueling, approved explosion-proof flashlights instead of aircraft lights should be used.

Before using fuel hose, nozzle must be brought in contact with some metal part of the aircraft remote from the fuel tanks to make doubly sure that no differential in static electrical charge exists.

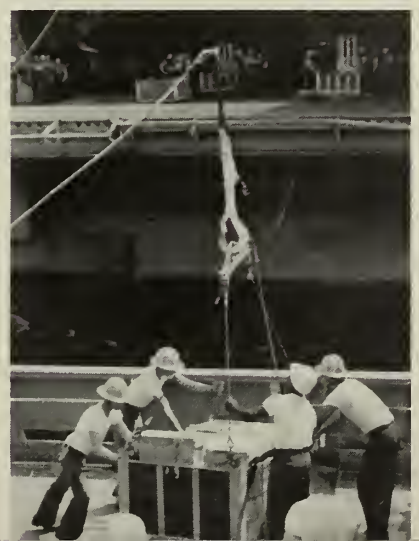
Connect the nozzle's independent static wire to a metal part of the aircraft at a safe distance from the filler openings and tank vents before removing tank filler cap (not necessary with pressure nozzle).

Fire-fighting apparatus and operator should be standing by during fueling operations.

Replace filler cap immediately after fueling.

Generally, obey all safety procedures outlined for flight deck personnel.

HARD HATS—Wear protective headgear when work is going on overhead or where there are other dangers.



Oily Rags

Keep oily rags in closed metal containers, only. Keep the containers covered, and empty them regularly.

Line Handling

Inspection: Fiber lines that are to be used to support men should be inspected when first put into use, and thereafter as frequently as may be necessary to insure their safe condition. Look for abrasion, broken fibers, cuts, fraying and deterioration due to acids or corrosive substances. Any lines with defects should not be used.

Winding the winch fall: When possible, wind the winch fall so the lever moves in the same direction as the load being handled.

Rigging: Riggers and others using slings to attach lifts to hoisting equipment should use only the approved safe methods for properly fastening the slings to the load and to the hook. Only experienced men should do this work. The load should

always be carefully calculated in advance, and no attempt should ever be made to lift a load greater than the rated capacity of the equipment in use.

Cylindrical loads: When lifting loads such as piping, by strap, chain or wire rope wrapped around the load, the wrapping must be given at least two turns around the object.

Multiple loads: Two or more separately rigged loads should not be hoisted in a single lift even though the total load may be well within the full load capacity of the equipment.

Knots and kinks: The rigger in charge is responsible for seeing that chains or wire ropes are not kinked or knotted.

Dragging rigging gear: Chains or slings should never be permitted to dangle or drag under loads.

Tag lines: Use tag lines to guide loads being swung any distance.

A few other pointers:

- Don't attempt to ride a load that is being hoisted.
- Stay out from under suspended loads.
- Never exceed capacity of a line or wire rope when lifting materials.
- Line or rope should never be dragged over rough or dirty surfaces.
- Lines not in use should be stored in a dry, well-ventilated place supported on slats or hung in loose coils.

Protective Equipment

Use rubber gloves when handling acids.

Wear safety shoes to avoid crushed toes.

Wear gloves when handling sharp objects.

Do not weld or watch a welder unless wearing suitable goggles. Same goes when grinding or chipping.

Wear a hard hat that meets current specifications in use by the Navy when working in an area where work is being performed overhead.

Generally, use suitable protective gear for any job requiring its use.

Knots

A good knot must hold fast without slipping. If it's a knot in general use and not an ornament, it should be easy to tie. The best knot is one which has these advantages and is easy to untie as well.

There is always the right knot for a particular job. A bowline is a good knot—one of the best in its place—but it is not good for mooring to a spar. You can't use a clove hitch on a boatswain's chair.

Learn how to tie knots properly, then learn which knots should be used where—and use the right knot for the right job in every case.



ON GUARD—Use protective equipment specified for job you are performing.

Highline Transfer

To transfer individuals singly at sea, the only approved rig is the manila highline.

All lines must be tended by hand.

Heaving in lines by hand, with a sufficient number of men standing by for emergency, is the only means by which proper caution can be taken against the highline parting from sudden strains by rolling ships. Manila is always prescribed instead of wire because wire cannot be tended by hand.

The burton method is a means of rapidly transferring four or five men in a skip box. It is used only when the situation demands quick transfer of a relatively large number of personnel and time does not permit individual transfer by the standard manila highline method. The danger, of course, lies in having winch operators on different ships controlling the transfer. Great care should be exercised under these circumstances.

Everyone assigned to transfer stations must become familiar with all phases of safety procedures and precautions.

Because transfer stations on receiving and delivering ships are in exposed locations, men working close to a ship's side must wear inherently buoyant life jackets at all times. If it is necessary to use inflatable-type life jackets, they must be inflated.

During rough weather, wear a life jacket in exposed areas topside.

When transferring anyone by highline over cold water, give him an immersion suit.

TAKE CARE—Ship's fiber lines should be inspected as frequently as may be necessary to insure safe condition.



ARE THERE any safety rules you can add to this list? Most assuredly.

But if you feel we've skipped some of the more important ones, why not make a list of those that come to mind? At the beginning of each week, print one of your safety rules in large letters and display the card in your shop or work area. Then you can keep safety rules constantly in mind on your ship.

After all, that's the only way to achieve safety.

—Bill Howard, JO1, USN

A SHORT COURSE IN NAVY SAFETY

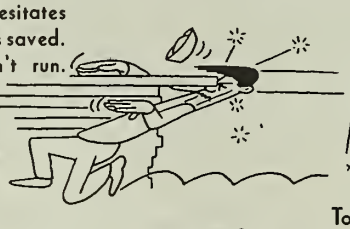
Take a laak at the figures shawn here and see if you're included amang them. If yau are, yau'll want to take the 5-minute course in Navy Safety, and then practice it an a 24-haur basis. Sure, the CO is respansible far the safety af his ship and his crew, but yau can't expect that ta include yau unless yau pravide a little caaperatian. In the day-ta-day routine of yaur jab, the way you think and the way yau act will determine ta a large extent the shape yau'll be in when it's time to hit the sack. There are twa gaad rules af thumb ta fallaw: First, overcome your own ignorance af the basic rules of safety, and second, practice these rules. And remember this slagan: In the Navy, safety is no accident.



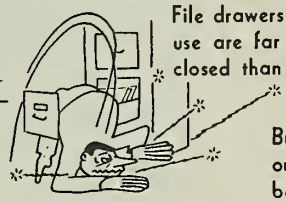
Ladders are nat storehouses. Keep them uncluttered.



He who hesitates is sometimes saved. Walk, don't run.



Handrails are provided for anly one reason— to be used properly.



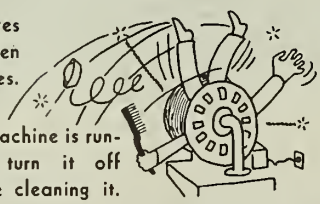
File drawers not in use are far better closed than open.



Buff the deck thoroughly. Wax can be slippery.



Keep your sleeves above elbows when working machines.



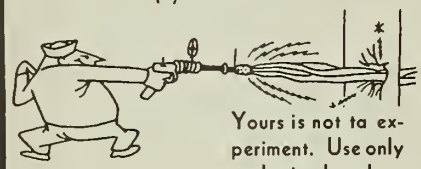
If a machine is running, turn it off before cleaning it.



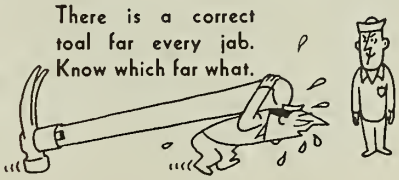
To avoid crushed taes, remember your safety shoes.



Rubber gloves are provided for acid-handlers. Use them.



Yours is not ta experiment. Use only autharized toals.

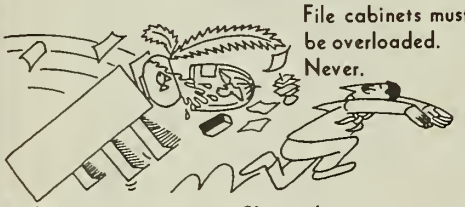


There is a correct toal far every jab. Know which far what.

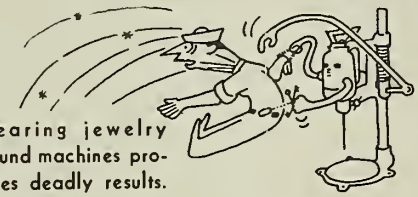




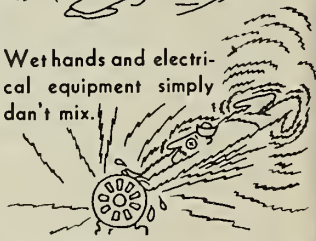
Overloading of hand trucks accomplishes nothing but harm.



File cabinets must never be overloaded. Never. Never.



Wearing jewelry around machines produces deadly results.



Wet hands and electrical equipment simply dan't mix.



You are issued protective gear to protect you. Use it.



Sharp objects can amputate fingers. Wear your gloves.



Tools in less than gaod conditian are dangerous tools.



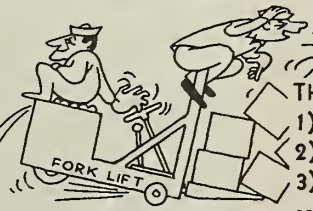
Hanging others is frawned upan. Watch extension cords.



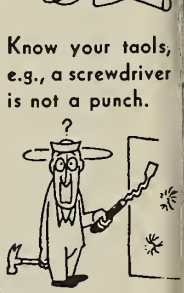
When working aloft, make certain your lifeline is secured.



Lifelines were not designed ta be raosted upon. Don't.



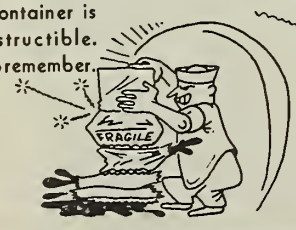
Three simple rules:
1) don't overload,
2) face forward and
3) don't use for personal transportation.



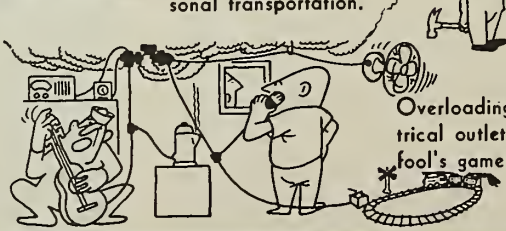
Know your taols, e.g., a screwdriver is not a punch.



Keep a hand truck below you or be ready to scurry.



No container is indestructible. Try toremember.



Overloading electrical outlets is a fool's game.

Prepared by ALL HANDS Magazine

Be certain you have sufficient light whatever you do.

Taking unauthorized swims is strictly for the dim-minded.

A lifeline around an open hatch is an excellent idea.

Know your own limitations so far as aid is concerned.

High explosives are precisely that. Be very careful.

Throwing blocks, crowbars, from ship to dock is stupid.

Machines left to run alone can cause serious damage.

Watch not the welder, if you do not have goggles.

While welding keep sleeves and pants rolled right down.

Welding tends to heat metal. Put up warning signs.

Acid not kept in lead or glass containers won't be kept long.

Woe unto him who does not read his safety manual.

Unless you have no need for oxygen, check ventilation.

Immediately repair or replace defective electrical gear.

Tools do not belong in the back pocket. If you slip . . .

Like everything else there is a right way and a wrong way to lift.

Use, keep covered, and empty regularly containers for rags.

Sailors who smoke while painting are courting disaster.

Cleaning the deck with inflammables just isn't done.

Your eyes are important. Protect them when grinding.

Someone is certain to stumble on a paint can left open.

Protective equipment is valuable. Keep it clean.

Munching on painted fingers equals lead poisoning.

Make sure that your support is safe and sturdy.

For the life you would love to keep, check all lines.

When taking a nap, be sure that you choose a safe spot.

The practical joker is a dangerous enemy. Shun him.

If you dig into a pile, you may or may not get dug out.

The most obvious rule of all is watch your step.

Accidents are caused by men who

Do not know job

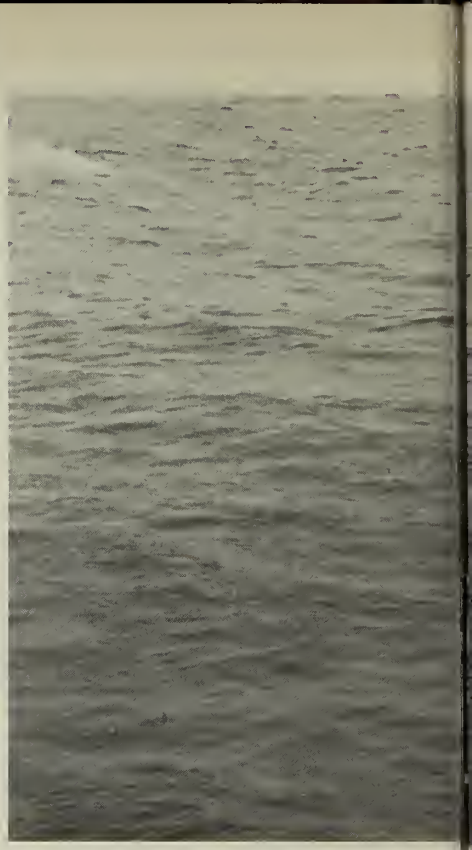
Are careless

Are practical jokers

Know it all

In closing doors gentleness is a good rule of thumb.





ON THE ALERT—Sharp eyes and quick action by ship's lookouts can be the formula for saving a crew member at sea.

Man Overboard-This Is

GREEN WATER over the bow, a slick deck, a moment's carelessness, and it can happen to you. You were working on the weather deck and suddenly you're swimming frantically to avoid the screws.

You hear six short whistle blasts (the universal danger signal—also used for man overboard). A lifebuoy splashes into the water nearby and another is thrown over the fantail.

They saw you go over, so you've got it made. Just relax.

On board ship the lookouts keep you in sight while the recovery team readies the gear for your pick-up. They're a crack bunch, sharpened by practice. Each one knows his job.

TAKING CHARGE—Ship's skipper directs recovery operations from the bridge.



The rudder is put hard left when the word "Man overboard, port side," reaches the bridge. The quick turn swings the screws away from you and reduces the ship's speed.

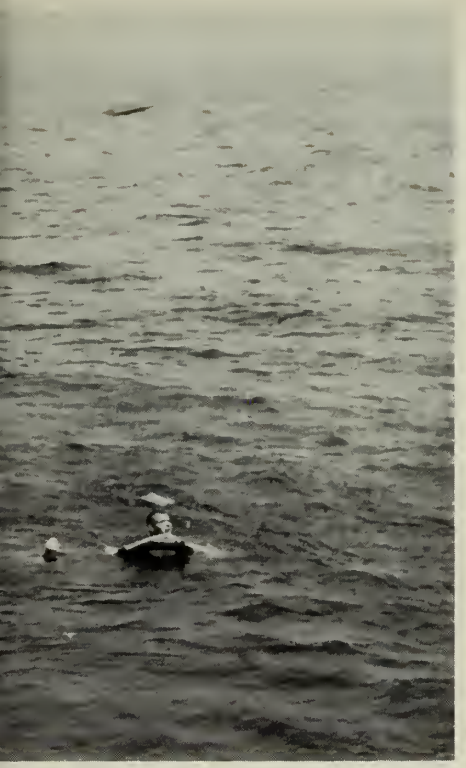
The OOD alerts the task commander. Other ships clear the area, leaving your skipper room to maneuver safely. In CIC your position is plotted on dead reckoning gear.

Your ship completes its turn and approaches you. A whaleboat splashes into the water. Soon, practiced hands pull you over the gunwales and someone throws a blanket around your shoulders. The boathook fishes out the life ring and it's all over.

You were lucky. The seas were fairly calm, and it was daylight. But while you're shivering in the boat you can't help but wonder what the results would have been at night, or in heavy seas or, perhaps, in shark-infested waters.

YOUR CHANCES might have been better than you think.

Darkness, for instance, causes few major problems if the seas are calm and someone sees you go over. Almost immediately after the alarm is



REMAIN CALM and wait for pickup.

No Drill



SING OUT 'Man Overboard' and toss the nearest life ring into the water.

sounded a searchlight will focus on you or on a nearby life ring. The OOD can then use that spot as a point of reference and complete his turn as he would in daylight.

A reasonably accurate 360-degree turn, however, is next to impossible when spotlights are limited by rain, fog, or rough seas. If the OOD has no reference point, his circle is likely to be imperfect—with disastrous consequences.

So a Williamson Turn will be used. This maneuver is almost guaranteed to return the ship to the exact spot where the turn was begun, regardless of weather or visibility. However, it takes a few minutes more than coming right around.

Once the turn has been successfully completed, the spotlight crew has a relatively small expanse of water to search. Your chances of being found are reassuring, especially if you're wearing a life jacket equipped with a light or if a man overboard signal marker was tossed overboard.

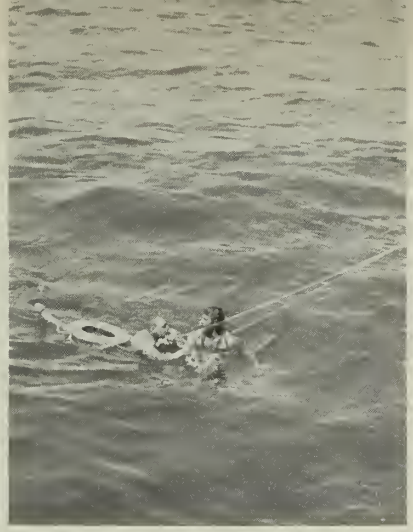
While the search proceeds, all unnecessary equipment will be secured and silence maintained on deck. That's your cue to raise hell.

Methods of pick-up, once you have been located, will depend upon the equipment at hand, and weather conditions. If you're a very lucky sailor (under the circumstances), and are serving with a large task force or a carrier, there is often a helicopter. Helo rescue can sometimes be completed within seconds of the accident. Failing a helicopter, a motor whaleboat may be used.

Unfortunately, darkness and bad

THE RESCUE—Swimmer leaves ship's whaleboat to assist shipmate into boat.




RESCUE SWIMMER with safety line attached takes horse collar out to victim who is then pulled aboard ship.

weather often preclude the use of either method. You may be recovered over the side.

Over-the-side pick-up entails maneuvering the rescue ship within a shotline's distance of the victim, sending out a swimmer with a line, and pulling in the man as though he were a fish on a hook. This is simplest for a small ship, so if you fall from a carrier or a cruiser, a nearby destroyer may be assigned rescue duties. They're mobile and fast.

YOU CAN—and must—depend on your ship. But despite the skill of the rescue team, you can expect to be on your own from ten minutes to two hours. During that time, survival will be up to you.

If you fall, the ships screws will be your first danger. Although the OOD may succeed in swinging the stern away from you if notified in time, don't depend on it. Strike away from the side immediately.

Luckily, the impetus of your fall will probably carry you several yards from the side, so the safe zone will not be far away.

Once your ship has passed, conserve your energy. If you don't have a life jacket, improvise one by inflating your trousers (see box, page 16). Don't swim unless you have a definite objective, such as a lifebuoy or a smoke flare. If you must swim, vary your strokes and your strength will last longer (see centerspread, page 18).

Although an expert swimmer will have an easier go of it, a Class III man can survive—if he doesn't panic.

The *Survival Training Guide* (NavWeps 00-80T-56) offers some advice about swimming in heavy seas. Swim on your stomach, with your back to the wind. Let the waves break over your head. To rest, float face down and take a single breast stroke when you need to breathe.

If there are sharks in the area, experts advise you to float on your back, moving your arms just enough to keep your head above water. Don't panic and thrash around, it will only attract sharks. The idea is to remain as inconspicuous as possible.

Should you be attacked, the shark

In an Emergency, Navy Come

Almost everyone has heard tales of helicopter crewmen who have gone into the water to recover injured airmen. Not so well publicized are the whaleboat crew members, who often do the same.

Two recent incidents come to mind,—one, by air (via helos) and two, by sea (via boats).

The story of the whirlybird rescue took place in the Med. The incident began during a daytime launch on board USS *Enterprise* (CVAN 65), when a *Vigilante* hit the water about four miles from the carrier, just seconds after the pilot and observer had ejected.

The *Enterprise* angel already was airborne and in the plane guard position just outboard of the carrier's island. The helo immediately left its station and sped toward the scene of the accident.

The downed pilot was located first, near a smoke flare. When the helo hovered overhead he signaled the crew with a double thumbs up. This may be translated: "I'm fine—check my observer."

After a short search the helo crew spotted the observer floating face down, his parachute billowing around him.

Airman J. S. Mitchell, one of the two helo crew members, fastened himself to the winch line and was lowered into the sea by the second crewman. Mitchell lifted the unconscious man's head above water and cut the parachute shroud lines with his free hand. He then attached the limp body to the hoisting line and watched while it was lifted into the open door of the helicopter.

The man was obviously in serious condition, so the helo immediately returned to the carrier where a doctor was waiting on the flight deck. Airman Mitchell and the *Vigilante* pilot waited in the water several minutes before being picked up by a planeguard destroyer.

The injured observer lived to become a happy statistic—the 644th man to be rescued by Helicopter Squadron Two, the angel's parent command.

About 50 per cent of the aviators who crash and are rescued at sea are recovered by helicopters, and the remainder are picked up by destroyers and whaleboats.

Helo crewmembers are the first to admit that they take their half off the top: They perform the daylight, fair-weather missions. But because helos are severely handicapped by darkness or bad weather, the more complicated rescues usually fall to whaleboat crews.

Which brings us to our second story—with a different twist.

watch (a member of the man overboard team) is armed, and may be able to shoot them.

CHANCES ARE GOOD you'll hear the ship's man overboard whistle before you've even cleared the stern. But if not, don't give up. You'll probably be missed soon and, with the aid of your improvised life jacket, you can stay afloat for a long time.

The story of Carleton Ingerson, who found himself in just that situation may be reassuring. While a catapult spotter on the flight deck of USS *Saratoga* (CVA 60), the airman was blown over the side by a jet blast.

It was night and no one saw him go. Jets were turning up on the cats, so his cries went unheard. While he watched from the water, *Saratoga's* running lights receded toward the horizon. He was a very lonely little man for a while.

But, as an important member of the flight deck crew, his services were soon missed. The captain was notified and retraced the ship's course on the assumption that Ingerson had gone overboard.

One hour and 25 minutes after the accident, the airman was located by a searchlight and taken aboard a destroyer in the task Group.

Carleton Ingerson's story also illustrates the importance of sounding the alarm—even when in doubt. The man who informed the bridge of Ingerson's absence should not have been embarrassed if the airman had



FROM THE AIR—Helicopter picks airman from water just minutes after crash.

...n the Double — By Air and By Sea

It was night. Off the coast of New Jersey two ASW helicopters from USS *Randolph* (CVS 15) were conducting a sub hunt. They were assisted by the destroyer *Mullinnix* (DD 944).

Once again everything seemed under control. Then one of the helos disappeared from the *Randolph* sky radar.

A few seconds later a new blip appeared on the *Mullinnix* surface radar. Presently that, too, disappeared.

Helo 54 was down in 44-degree waters. Life expectancy of the crew? Between one and two hours.

On the destroyer, word was passed to station the recovery detail. Among those who mustered at the whaleboat were LTJG William Reisner, boat officer, and Signalman Third Class J. I. Amerson.

The boat was lowered and the coxswain shoved off in the direction of a signal marker near the crash scene. 54's sister helo was hovering over this marker. When the whaleboat approached, the helo began moving toward a small white light some 300 yards distant. The boat followed.

The small light proved to be the emergency flashlight attached to one downed airmen's Mae West. Two others were floating nearby.

The boat's approach to the first victim was complicated by confused seas and the propwash from the helo escort. When the coxswain finally succeeded in nearing the man, LTJG Reisner extended the boat hook. The helo crewman grabbed the hook and was hauled into the boat.

An identical approach was used for the second man, but the victim did not move toward the extended hook. The coxswain was unable to approach near enough for the boat crew to grab the airman.

Amerson jumped into the water to recover the unconscious man. But the seas were becoming worse, and he had trouble making headway toward the victim. To make matters worse, the whaleboat began to drift away.

LTJG Reisner went in to help, and the two men managed to bring the victim to the boat.

The third man was conscious, and his rescue posed no problem.

After all three men were in the boat, the rescue crew learned there was still another crewman in the water. The search began again, and the last man was located some 250 yards from where the other three survivors had been found.

Like the second, this man was unconscious. Once again, Amerson went over the side and pulled the airman back to the boat.

All four victims were on board the *Mullinnix* thirty minutes after their helo had hit the water: Thanks to the quick work of recovery, the helo crew escaped with minor shock and exposure.



Whaleboat crew goes to the rescue during demonstration.

The Williamson Turn

Navymen familiar with the Williamson Turn know it will help to return a ship to the same location as when the maneuver was begun. This maneuver is most useful when a man is overboard at night, in a choppy sea, or in low visibility and he is not in sight when the alarm "Man overboard" is sounded.

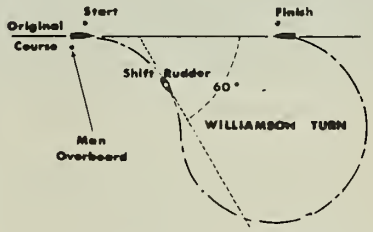
A man overboard faces three immediate dangers: mangling by the ship's propellers, drowning, or abandonment because he can't be located.

The Williamson Turn (named for CDR John A. Williamson, USNR, who developed it in 1942) reduces these dangers by swinging the ship's screws away from the victim, and assists in returning the ship accurately to the approximate area where the man fell overboard.

When the officer of the deck receives the word that a man is overboard, he orders hard rudder toward the side from which the victim fell. As the ship's stern swings away from the victim, maximum engine speed is usually ordered and the compass heading watched closely.

The rudder is held hard over until the ship's head nears a specific angle (usually 60 to 70 degrees) from the original heading. When the ship's head nears the 60-to-70-degree differential from the original course, the rudder is then shifted full over to the other side.

The rudder is held hard over until the reverse of the ship's original course is approached and the ship is steadied up on this reciprocal course. The engines are slowed or stopped. At this point the ship should be about the same distance



from the victim as the ship's tactical diameter. A sharp lookout must be maintained, as a person in the water presents a very small object and is very difficult to see even in clear weather.

The Williamson Turn must be used with discretion. It wouldn't be particularly smart for the conning officer to order the ship turned at maximum speed into a heavy sea or when there is danger of a collision.

The Williamson Turn is not always the best maneuver to execute, even under favorable conditions. If the visibility is good and the sea is calm, particularly when the man overboard is in view from the bridge, the victim may be reached much faster simply by continuing the turn and conning the ship to the best position for recovering the man. In some ship types, recovery might even be faster by reversing the engines and backing down to the victim.

In many ships, the Williamson Turn is only one of many procedures carried out to insure the safe return of the man overboard. Sounding alarms, dropping lighted lifebuoys, maintaining a constant visual contact on the person with binoculars, stationing additional lookouts, illuminating the area with searchlights, maintaining a plot of the ship and victim's positions on the DRT, manning lifeboats and requesting aid from nearby ships or aircraft are part of established Navy procedure.

When the weather is rough, at night, or in poor visibility, the Williamson Turn frequently assures the man overboard a better chance of telling his grandchildren of the night he was pulled from the sea by a rescue crew.

later been found in the gedunk.

IF A BUDDY falls overboard, it may be up to you to trigger the rescue operation. If you see—or think you see—a man fall yell, "Man overboard, port (or starboard) side!" Keep yelling until you know you've been heard. In the meantime, throw over a lifebuoy.

Above all, don't hesitate. If you do, the OOD may receive the word too late and be unable to swing the stern in time.

When the alarm is sounded, but doubt exists, the ship will proceed on the assumption that there is, indeed, a man overboard. But at the same time, the OOD may hedge his bet and call a muster.

Everyone must muster in person. If all hands are on board, the search may be called off. But if a man is absent, it must continue indefinitely.

And may the Great Sea King help the missing seaman if he is later found asleep in the fan room.

So much for shipboard muster.

A positive attitude is invaluable in an emergency. Unfortunately, it is also a sad but inescapable fact that not all rescue operations end happily. Superb seamanship, meticulously laid plans, your own attempts to remain afloat—may be thwarted by a fluke of luck.

Consequently, there are safety regulations. Don't lean on life lines. Don't go on deck in bad weather if you don't have to. Don't work without a life jacket if there is danger of falling overboard. Don't, don't, don't. The rules will occasionally cramp your style (a life jacket can be a hot and uncomfortable burden), but they may also save your life.

Granted, your boat crew needs the practice. But that's why they have Oscar.

—Jon Franklin, JO2, USN

KEEPING TRACK—CIC watch team plots relative position of man overboard.





Think—and Swim

SWIMMING can be great sport when you're on liberty at a place like Waikiki Beach or Acapulco. But, when you're playing the title role in "Man Overboard" or you're trying to help a shipmate in trouble in the water, it becomes a matter of life and death.

At any time, some sailor somewhere may have to swim for his life. While you may feel that the chances are very slim that you will ever find yourself in a situation where you will have to "swim for your life" it's a good idea to know what to do—just in case. It will be too late to learn after you are in the water.

The swimming skills and lifesaving techniques you have already learned in recruit training may someday save your life or help you to save someone else. Remember these skills and practice them whenever you have the opportunity. The chart on the following pages points out the important things to remember if you are to survive at sea. Study the chart and combine the information on it with the knowledge you already have and you won't go wrong.

These pointers are not intended to teach you how to swim. They are aimed to indicate basic factors or problems you may have to face, and explain how to face them.

How To Breathe—No matter how far or how fast you can swim you will never feel quite safe in the water until you have mastered the proper breathing techniques.

In swimming, almost all the breathing is done through the mouth. The inhalation is taken entirely through the mouth and the air is exhaled by the mouth with some coming out through the nose. If you keep your face flat in the water there will be no tendency for the water to enter your nostrils and you will avoid that "smothered feeling."

If you are a good swimmer you have probably already acquired "rhythmic breathing." This is nothing more than breathing in series—inhaling through the mouth as your head is rolled to the side and exhaling through your mouth and nose as you turn your face downward beneath the surface. If you don't hold your breath, the series will be uninterrupted. While simple in itself, rhythmic breathing is of great importance to the swimmer, since it is relaxing, and because adequate ventilation of the lungs at regular intervals is essential to continuous swimming.

Learn To Relax—In a survival situation, the ability to relax is half the battle. There is no need to panic, for water will support almost all your weight. Some swimmers mistakenly believe that it is necessary to keep the arms and legs moving to stay afloat. They don't realize that the body's natural buoyancy will serve to keep them on the surface. Much effort is wasted by struggling to stay afloat—effort and energy that could be used to make progress in swimming to safety.

A safety factor of great value is also the ability to float or rest in a floating position on your back. After swimming for some time you may become tired and need a rest—at such a time, if you have the ability to turn on your back and rest in a floating position, it may be a factor in saving your life.

Jellyfish Float—Another means of resting is the "Jellyfish Float." After taking a deep breath, submerge your face and slowly slide your hands down your legs until they reach your ankles. Don't try to bend your knees or lift your feet. As a rule, even before your hands reach your ankles, your upper body—which has of course been gradually submerging—begins to buoy you up and your body is suspended at the surface with your rounded back showing above the water.

The "Bobbing Jellyfish" is an amazingly simple skill and is based upon your ability to control your breathing and to do the Jellyfish Float described above.

It is a survival skill designed to save your life if you are forced to remain afloat without aids while you are waiting to be rescued.

Here's how it is done:

- Assume a Jellyfish Float posi-



NOW'S THE TIME—Swim call is a time to brush up on survival swimming tricks.

tion. Allow your arms to hang suspended toward the bottom, drop your head so your chin is on your chest. Allow your legs to hang free and relaxed. Hold your breath. Remain in this position as long as it is comfortable.

• When you need a breath of air, simply move your hands up and forward below the surface and, at the same time, exhale through your mouth. Note that your hands are extended forward just below the surface at the end of this phase. You then press your hands down and back as in a Butterfly Breast Stroke and, at the same time, lift and turn your head to one side, inhaling through the mouth when you rise to the surface.

• To go back down, slowly allow your hands to move back to their free hanging position, return your face to the water with your chin on your chest and you will hang suspended like a jellyfish. When another breath of air is desired you just "bob up" as before.

• If, in returning to the Jellyfish Float position you should go down too deep after taking a breath of air, you may use a modified flutter kick or scissors kick with your feet to put you near the surface. However, in most cases, if a swimmer secures an adequate supply of air in his body, he will remain at the surface in a satisfactory floating position.

Leaving the Ship—Should you ever find yourself in an abandon ship situation, don't jump—unless the ship is low in the water, or jumping is the only way off. If it's at all possible, use ladders, cargo nets, lines, hoses and such to lower yourself. This can prevent injuries from awkward landings or from landing on unseen objects or other men already in the water.

Swimming Through Fires—It is not advisable to attempt to swim through burning oil, flames or debris—but it is possible to swim under them. If you ever find it necessary to jump into oil or flames, remember to jump feet first from the side of the ship facing the wind. To make the jump, take a deep breath, hold your nose and keep your feet close together as you learned in recruit training. A kapok jacket or inflated life belt should never be worn when it is necessary to swim under water. Clothing should be worn as a protection against flames or debris, but shoes should be removed, because they slow underwater progress.

You should stay under water as long as possible. When you need air, come to the surface with your arms above your head. When your hands break the surface, you should immediately begin beating away the burning oil with a circular thrashing motion. When your head breaks the surface, turn your back to the wind to help protect your face from the smoke and flames, and keep beating away the burning oil. Take a deep breath and submerge, using a feet first dive. Swim underwater as before, to the windward, until you are out of the burning oil or it is necessary for you to come up for air.

Avoiding Cramps—Violent movement in the water, long swimming or continuous swimming in cold water may cause muscular cramps. These are most likely to occur in the arch of the foot or in the calf of the leg. Their greatest danger is that they will induce panic. The swimmer who is seized by a cramp should take a deep breath, bend forward in a Jellyfish Float position and slowly but firmly knead the cramped muscle. After releasing the cramp the swimmer should change his stroke before continuing to swim. Next time you go swimming, practice this method of curing a make believe cramp—it might save your life someday.

Clothing—Help or Hindrance?—If it is necessary to remove your clothes while in the water to make better progress, remove the heaviest articles first. By using the jellyfish float the shoes (if you still have them on) may be taken off.

To remove trousers you could assume a back float position, unfasten them, slide them down over your hips and flutter kick out of them. Another position frequently used to remove trousers in the water is the Jellyfish Float position. Remember that clothing is a real protection against exposure and only clothing which seriously interferes with your ability to keep afloat should be removed.

Your clothing can also come in handy to keep yourself afloat. Your jumper or shirt may be inflated by tying knots in the cuffs and collar, blowing air in the opening and holding it under water. Your trousers make even better buoys than your jumper.

After the trousers are removed float them on the surface with the fly up, tie a single knot in each leg, then take one side of the waist in each hand and work the garment around on the surface until the legs

are at the back of your head and neck. Then flip the trousers over your head and bring the waist down smartly on the surface, trapping a good pocket of air in each leg. Next, gather the waist together under the water and hold it in one hand and you will have a fine pair of water wings or "water legs."

Before publication this article was checked by the American Red Cross, which had these comments to make on using your clothing to keep yourself afloat:

In many cases the shirt may be inflated while the individual continues wearing it, by fastening the collar and cuffs and securing all the buttons, then blowing air into the opening between the buttons (held open with one hand) while holding the tails of the shirt underwater with the other hand.

Another way to get air into the shirt, which is more efficient, is to float on your back and scoop air under the front of the shirt with one hand, the other hand grasping the body of the shirt below the last button and stretching it out from your body. Then hold the tails of the air-filled shirt beneath the surface of the water.

The scooping action can also be used to fill the trousers with air, and it may be easier than flipping wet trousers over your head. Be sure that the fly is fastened, and that the entire waistband is kept beneath the surface of the water.

Helping Others in the Water—In your efforts to reach a life raft or lifeboat keep a lookout for your shipmates. Some of them may be wounded or otherwise unable to swim to safety and you may be able to help them. But be sure you know what you are doing before you start. A drowning person is usually far advanced in the stages of panic—his one idea is to keep his head above water so that he can breathe. Nine times out of ten a drowning person will try to grab some part of the rescuer's body or clothing in order to stay afloat.

As the rescuer you should try to reason with the victim while you approach him. Tell him exactly what you are going to do and how he can help. Be sure you don't panic yourself—if he sees that you are relatively calm it will help to put him a little more at ease. However, if the drowning man does grab you, dive under the water, taking him down with you. Underwater, a man who is panic-stricken will usually let go. Under no circumstances should a drowning man be struck. His system has already had sufficient shock to cause severe physical reactions and the added shock of a severe blow would only make him worse—it might even cause heart failure.

There are several methods of carrying the victim to the lifeboat or life raft. Select the method which best fits your own abilities, the condition of the victim and the distance you will have to carry him. Here are a few brief descriptions of the most common lifesaving carries:

- *Hair Carry*—This is easiest because it allows the most freedom of movement on the part of the rescuer. The rescuer should turn on his side, slide one hand up the back of the victim's head to the top and grasp his hair tightly, leaving the rescuer's other arm and his legs free for swimming with a side stroke. The rescuer may swim on either side, changing hands whenever it is necessary to rest.
- *Head Carry*—The rescuer should swim on his back, holding the victim's head above water with both hands meeting under his chin.
- *Cross Chest Carry*—The rescuer should turn on his side, place his arm over the victim's shoulder, across the chest and under the opposite arm. The victim's body should be supported on the rescuer's hip and the rescuer should swim side stroke using his free arm and both legs. This carry may be done on either side, but should not be used for long distances because it is very tiring.
- *Tired Swimmer's Carry*—If the victim has enough control of himself to obey orders, he should be told to turn on his back with his feet toward his rescuer, spread his legs and place both of his hands on his rescuer's shoulders with his arms still. The rescuer then assumes the position for the breast stroke and swims, pushing the victim ahead of him as he goes. The breast stroke is useful because it leaves the arms and legs unhampered for swimming and is only slightly more tiring than ordinary swimming.

The Red Cross points out that one of the safest ways to attempt a rescue is to push some sort of floating support to the victim, if possible. Otherwise, the next best thing would be to extend an object such as a stick, shirt or short length of line to him and pull him to a floating object, or to make a swimming approach from the rear of the victim, grasp his hair or open collar and tow him to safety if the distance is short.

Once you reach some type of floating support it is even possible to perform mouth-to-mouth resuscitation, if necessary in the water. (See page 29).

Lifeboats and Rafts—Once you have reached the lifeboat or raft you are just about as good as saved. The Navy, Coast Guard and Merchant Marine have equipped all lifeboats, rafts and planes with survival equipment adequate for emergencies at sea. It would be a good idea for you to become familiar with the boats and rafts on your ship, and the equipment they have on them (see page 26). By this time the Search and Rescue teams will be out looking for you (see page 46).

With the swimming skills and lifesaving techniques you learned in recruit training, the modern survival equipment on lifeboats and life rafts and the speed and accuracy of the Navy's search and rescue planes, the chances of survival at sea today are pretty much in your favor if you keep your head. If you remain calm and keep your spirits up you will find the battle for survival a fairly easy victory. Just remember that although you may have to abandon ship there is no need to abandon hope.

SWIMMING for fun can pay you double in experience gained and sense of confidence acquired in the water.



SURVIVAL



Know and check your ship's safety equipment before an emergency happens. Be prepared for the rare occasion which compels you to take to the water. Learn skills to help you

ENTERING THE WATER

There are many ways of entering the water, some right and many wrong. Remember, your actions influence others. Obey orders. Keep calm. Don't get into the water sooner than necessary. Your method of entering the water may vary according to whether you are on a ship, plane, small craft, or life raft.

CLOTHES



Keep your clothes on. You may need them later. Stow your hat inside your shirt. Shoes can be taken off in the water and saved by tying to yourself or floating driftwood. They may come in handy later. Shirts and trousers can be inflated to improvise floating aids. Discard chin-strap helmet before jumping.

LIFE JACKET



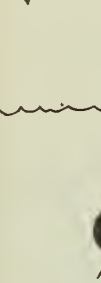
Fasten securely. If it is the pneumatic type, do not inflate it until you are in the water and well away from the ship. If it is the kapok or cork type, be sure to hold it down while jumping. (See below.)

CLIMBING DOWN



If possible, lower yourself into the water by sea ladders, cargo nets, knotted lines or even fire hose. A pair of gloves for climbing down will help to prevent badly skinned hands. Don't rush the other fellow, and once in the water, get out of the way of those following you.

JUMPING



DON'T dive head first! If you *must* go overboard in a hurry, jump feet first. Even jumping is dangerous and should be done only when necessary. Jump to the windward from the lowest possible part of the ship and from the bow if the propeller is still turning. Consider the possibility of submerged objects, floating debris, and other personnel in the water. Look straight ahead when starting your jump and don't look down while in midair. (It may throw you off balance.) Keep the feet tightly together and the body straight. Grasp the nose with one hand and hold the opposite shoulder with the free hand over the hand holding the nose. Return to the surface by looking upward and swimming toward the surface. If the surface of the water is covered with burning oil, swim through it by splashing a path in the water ahead of you. Remember to swim into the wind to protect yourself from the ship drifting down on you and from burning oil. If explosions are likely—swim on your back. Stay close to others until help arrives.



STAYING AFLOAT

Remember it is simple to stay afloat. The most important survival skill is the ability to remain afloat with little or no effort for an extended period of time. Relax—don't waste energy. Learn to control your breathing—it's the number one survival skill. Inhale through the mouth—your face away from the breaking sea. The chances of survival are increased and fears are lessened when one has confidence in his abilities to remain afloat.



FLOATING AIDS

Debris can be a friend—not always a foe. In addition to your life jacket—oars, wooden boxes, kegs, and other floating debris will keep you afloat. Learn to inflate your shirt or trousers.



BOBBING JELLY FISH FLOAT

If you have lost your life jacket and no floatation device is available, this valuable skill will keep you afloat. While its primary advantage is that of affording a long range resting position, this method of floating is also useful for removing clothing, treating cramps, and scanning the bottom. See text and illustrations below.

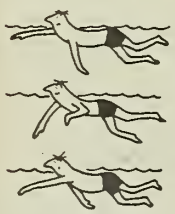


(This skill can be modified to attain some forward motion by extendin

DISTANCE SWIMMING

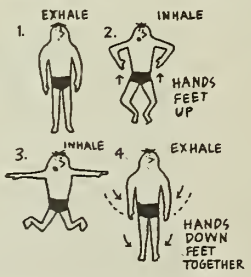
A variety of strokes is desirable to enable you to maintain yourself in the water to reach land or floating objects. Any one of these quiet, steady strokes, shown below, may be used exclusively or alternately with others as a restful change. They are adaptable to carrying equipment, to saving others, or in case of injury. All of these strokes are recommended as energy savers, and will enable you to cover long distances with a minimum amount of effort.

HUMAN STROKE



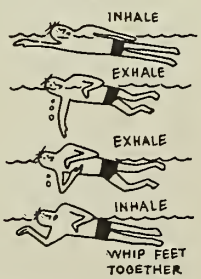
prone position
reach and press down
flutter kick

ELEMENTARY BACK STROKE



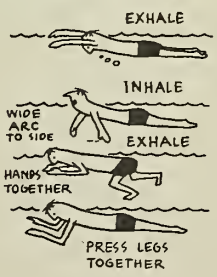
on the back
draw up arms—extend—press back
inverted breast stroke kick

SIDE STROKE



side position
reach and press
scissors kick

BREAST STROKE



prone position
reach and press side
breast stroke kick

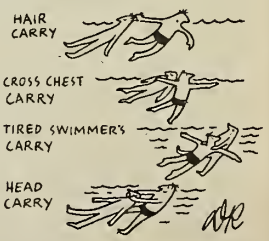
RESCUE OF OTHERS

Successful aid to your shipmates depends on your presence of mind, knowledge of life-saving skills, and strength to carry them out. It may be that just shouting instructions and sharing your know-how in staying afloat will

APPROACHES



SWIMMING RESCUES



SWIMMING

stay afloat long enough for help to come and for you to be able to help others. Don't be the "man overboard!"—know your ship's safety regulations.







TREADING WATER

Maintain a vertical position in the water, submerged to the chin. The usual arm motion is sculling (hands moving as though you were smoothing sand). The legs move in a vertical flutter kick, scissors kick, or breast stroke kick.



FLOATING ON THE BACK

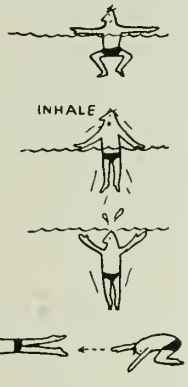
Keep head back, face up, ears in the water, back well arched and arms outstretched to the side or overhead back in the water. Remember to keep the palms UP and chest high. Position of the body can be controlled by moving arms forward and backward. Relax legs. Develop a definite breathing pattern.



UNDERWATER SWIMMING

If there is danger on the surface, swimming under the water can be an exceedingly effective protection. Such hazards as floating debris, flaming oil, strafing and flying missiles can be avoided by swimming a few feet below the surface. This is an invaluable skill for recovering objects and for lifesaving tactics.

SUBMERGING



If you are swimming along the surface and find it necessary to submerge quickly the feet-first surface "dive" is recommended. Start with the body in vertical position, arms extended along the surface of the water . . .

THEN press down on the water with your hands, at the same time snapping the legs together in a vertical scissors kick. This action will lift you higher out of the water. Keep your body straight and your feet together and the weight of your body will start you down . . .

AS YOU DROP BELOW the surface, and your head is submerged, sweep your arms (with the *palms up!*) in a wide arc to the side and overhead to force yourself deeper into the water . . .

TO LEVEL OFF to swimming position, curl up in a ball by bending forward at the waist, pull the knees up, reach forward and start to kick. Keep the chin tucked into the chest to insure remaining under water.

BREATHING AND SURFACING

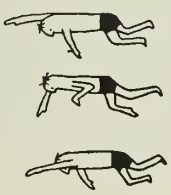


TO SURFACE and replenish air, lift the head and swim upward. Break the surface of the water and inhale through the mouth, submerge immediately as above. Exhaling is done through the nose and mouth at intervals while swimming to reduce internal pressure.

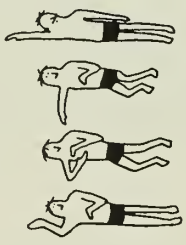
BURNING OIL ON THE SURFACE can be cleared by splashing vigorously with the arms in a swirling motion as you break the surface.

STROKES TO USE

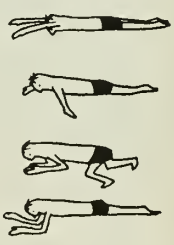
HUMAN STROKE



SIDE STROKE



BREAST STROKE



exhale *inhale* *hold breath again*



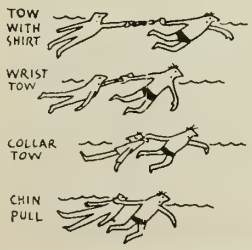
slowly below the surface... *... press hands down and back.... lift and turn head to breathe...*

your arms forward and doing a scissors kick as your face goes back in the water.)

IMPORTANT! If you're not a capable swimmer, don't enter the water to attempt a rescue.

do the trick. Possibly words of encouragement may be all that is needed. But—if a shipmate is exhausted, in a state of panic, or unconscious, your practice of proven lifesaving techniques may save his life.

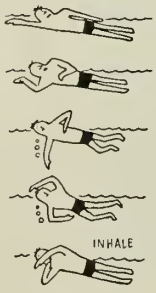




SPEED SWIMMING

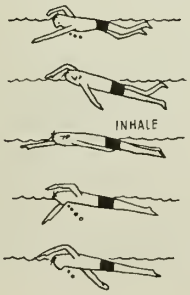
While the over-arm strokes are tiring to average swimmers because the arms must be brought out of the water, they are of value when bursts of speed are needed. Because of falling debris, ship's suction, burning oil, and other personnel jumping into the water, the area near a sinking ship is dangerous—you'll want to get away as soon as possible. A speed stroke is imperative also for rescue work, to escape enemy action, and to catch up with a lifeboat or raft.

OVERARM SIDE STROKE



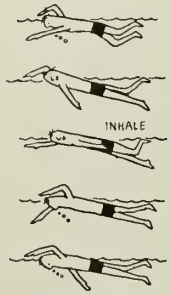
side position single over arm scissors kick

TRUDGEN STROKE



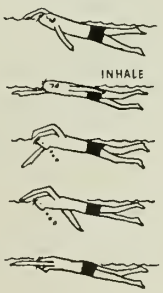
prone position double over arm scissors kick

TRUDGEN CRAWL STROKE



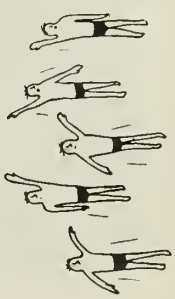
prone position double over arm scissors and flutter kick

AMERICAN CRAWL STROKE



prone position double over arm flutter kick

BACK CRAWL STROKE



on back double over arm flutter kick

Life on the Ocean

YOUR PLANE goes down, or you're forced to abandon ship. In either event, you're lost at sea with only a liferaft or boat and a few pieces of survival equipment. So, what next?

The shipwrecked seaman or downed aviator of today has a much better chance of survival than his predecessor of only a few years ago. Your period adrift is likely to be relatively comfortable and of shorter duration.

Statistics show that as a result of teamwork between planes and rescue ships, most survivors are picked up within three days—and many within a few hours.

However, many men have died at sea simply because they didn't know *how* to survive. Carelessness, ignorance, poor management, and loss of hope on their part have cost them their lives. Don't let this happen to you.

You have a lifeboat or raft equipped with survival equipment adequate for emergencies at sea. You need only survive, and wait to be found. The Navy knows you're missing, and is looking for you.

Now get down to business.

DON'T DELAY before organizing. Your own ideas and planning are required to make the most of the equipment you have. Take a careful inventory of your provisions, and store them where they will be safe, even against high seas. Secure your gear to the floor of the raft or boat. Any equipment not lashed down is liable to be lost.

If there's more than one life craft in your area they should be lashed together. Plans should be made for rationing food and water. No one should eat or drink during the first 24 hours.

Arrange watches and cooperate in standing them. Save your clothes. Although it may be warm during the day, you may need something to wear at night.

If your lifeboat has a sea anchor, trail it to keep the craft headed into the running direction of the waves to help prevent it from capsizing.

Don't get unduly excited, and don't rush. Do things slowly to conserve your energy.

Signaling Equipment

Your signaling equipment is important, because lifecraft are not easily seen from aircraft more than 3000 feet above the water. It is also difficult to spot a lifeboat from a surface ship, particularly when a sea is running. Stow your signaling gear in such a manner that you can reach it in a hurry.

- **Mirror**—Your signaling mirror enables you to reflect a beam of sunlight eight to 10 miles toward a rescuing ship or aircraft. It may be a bit tricky to use, so follow the directions carefully.
- **Pyrotechnics**—If you have pyrotechnic signals, such as the Mk 13 Model 0 day smoke and night flare, remember that under most conditions they can't be seen beyond two to four miles. You should actually be able to see a rescue craft before you use a pyrotechnic signal.
- **Flashlight**—This is one of the most commonly used night signals for survival. It should be kept out of the water to insure good service and maximum life. Conserve the batteries as much as possible by using the flashlight only when it is really necessary.
- **Whistle**—In a fog, or at night when visibility is low, your whistle may be the best means of attracting attention.
- **Fluorescein dye marker**—This powdery substance may be sprinkled on the surface of the sea to color the water a yellow-green. This makes it easy for nearby searchers to spot you.
- **Tarpaulin**—A brightly colored tarp will help attract attention and may be used for collecting water and protecting you from over-exposure.



LIFE RAFT WITH TARP RIGGED FOR SAILING

Water

If you have water you can survive as long as 21 days without food. Water is the most important single factor in determining your survival. The amount you'll need varies with weather conditions, physical exertion and your individual resistance. Under average conditions a man needs at least one quart of water a day, but survivors have been known to live for 10 days or more on as little as two or three ounces of water per day without causing any apparent body damage. One Chinese seaman drifted 133 days in the Atlantic, subsisting on fish and rain water, and walked ashore when rescued.

Wave

Without water, a man in good health becomes delirious in approximately four days. Death will occur in from eight to 12 days.

If you use your water intelligently, you may come through in reasonably good condition with a supply on which another person might die of thirst. If you are extremely thirsty, sip slowly and don't take an excessive amount. If you are hot from the sun, avoid drinking cold water if you have it, or an excessive amount of any water.

If your supply is low, and you must do some form of labor, you will lose less through sweating if you drink small amounts at fairly frequent intervals than by taking a lot at a time. But, if water is plentiful, drink all you can hold because your body can store it. Little of the water taken in large quantities when you are dehydrated is lost.

But water does evaporate through the skin. (Some survivors have prevented such evaporation by remaining in the sea for hours at a time.)

Use your life craft's drinking water kit, or collect rain water. The drinking water kit consists of a metal container in which briquets of salt-removing chemicals, a plastic processing bag and mending tape are packed. The processing bag is large enough to permit one briquet to be inserted. The quantity of sea water to be added is governed by a line marked on the bag. Each briquet will make about a pint of water.

Collect rain water in any available receptacle, using clothing, parachute or sails. Devise methods before there is an actual need. If a shower promises to be light, take steps to get every drop you can. Wet your cloth or canvas catchment in the sea so that the fresh water will not be absorbed by the fabric. (The amount of salt water contaminating the rain water will be negligible, but the amount of fresh water lost through absorption if you fail to first wet your canvas will be considerable.)

In a driving rain, a piece of canvas or any large flat surface held at an angle to the wind will catch water.

Water containers can be made with an improvised awl and some canvas. To make the bucket watertight, reinforce the seams with a narrow canvas binding calked with fish slime, then let it dry into the seams.

When the going really gets rough, the blood of birds and the blood and body fluids of fish are drinkable and nourishing.



AT 'SEA'—Navymen demonstrate 12-man life raft and signaling equipment.

Food

If you lack water, don't eat. Your body uses water in digesting food and eliminating waste products.

Liferaft rations are packed in individual cardboard boxes with 15 wrapped servings per box. Each carton contains a carefully selected list of items, including not only various types of foodstuffs but also cigarettes, chewing gum, candy and safety matches, all in watertight wrappings.

Remember to abstain from both food and water for the first 24 hours. After that, ration what you have; and when that is gone live off your body fat and protein.

One pound of body fat will provide your system with an equivalent of two good meals. The rate at which body fat and protein are converted to heat and energy will depend on air temperature and your activity and mental state. You can live longer on your stored energy by relaxing mind and body and guarding against exposure to extreme temperatures.

The condition of your body will determine whether you can or will eat starvation foods. The sea is far richer in different forms of life than the land or fresh water, and if fresh water is available there is little danger of starving to death. The trick will be to tap this wealth of food.

- **Fish**—Fish caught at sea are good to eat cooked or raw. Poisonous fish

are seldom found in the open sea. However, don't eat jellyfish; they contain stinging cells which are poisonous.

The heart, liver and blood of fish are good to eat, though in some fish they are less palatable than the flesh. Intestinal walls are edible. Intestines should be avoided unless they can first be cooked. The stomachs of large fish may contain small fish which are good to eat.

Fish spoil quickly in warm weather. Clean and eat them without delay and dry what is left. If the sun is hot, fish can be partially cooked by cutting them into thin slices and placing them on a dry metal surface.

Many species of fish are confined to certain depth zones. Some range through a wide variety of depths, while still others migrate from zone to zone at different times of the day. Watch for schools of fish breaking water. Schools of small fish are good indications of the presence of large fish (and vice versa).

If you're lucky you'll have fishing tackle, but even if you don't, the situation is not hopeless. Small fish can be caught with a skewer or gorge hook made of wood or metal and a short line improvised from shoe laces, canvas or clothing. If you have hook and line, but no bait, a strip of leather cut from the tongue of your shoe, a button, or a piece of canvas fastened to the hook and trolled behind your boat may prove effective.

Flying fish are probably the most available source of food if you have no equipment. Some may glide into or against your boat. At night they may be attracted by a light and scooped into a net. Shine your light on the side of your boat or on any surace that will reflect it.



SEAWEED CAN BE COLLECTED AND EATEN

Fish are more apt to see and strike a moving bait than a still one, so keep your bait moving to resemble a small fish.

Many small fish are attracted by shade. Lower your sail or tarp into the water. Fish may gather under it. Many species come to the surface at night, so fish shallow and use a drag net. But, try fishing at different times of the day and night at all depths. Don't give up. Sea life is not evenly distributed, and sooner or later you will have luck.

• **Birds**—All sea birds are edible and nourishing, though they may have a fishy flavor and musty odor. Part of any bird may be used for bait.

Birds may be scarce on the open sea, particularly in the North Atlantic. In the North Pacific most seabirds are found near the coasts.

In the southern oceans many species of birds may be seen and caught hundreds of miles from shore. Land birds migrate miles over water following schools of small fish, and may alight on your lifecraft to rest.

Gulls, albatross, terns and gannets can be caught by dragging a baited fishhook behind the boat, or lured within shooting distance in the same manner. A flat sharp edged triangular shaped piece of metal or shell dragged behind the boat will attract gulls and albatross. A shiny or colored object is most effective and a bait of fish or intestines adds to its attractiveness. The bird dives, seizes the lure, and the sharp points catch in its bill and hold fast.

Birds settled on your boat may be captured if you make a loop with two pieces of line and place some fish entrails or similar bait within the loop. When a bird is attracted to the food, pull the loop about its legs.

Whatever bird you catch, use all of it. The smaller feathers can be used to make a fly or lure. A spinner can be fashioned from the long plates of the bill. The bones can be used for skewer or barbed hooks and quills stripped to make string. The skin is highly nutritive, but if warm clothing is the pressing problem, skin the bird down the back, dry in the sun and use the thick downy breast feathers for a cap, ear muffs, scarf or shoe lining.

• **Sealife**—Small forms of life drifting about in the sea furnish food directly or indirectly for all the larger types. This drifting life is most abundant in northern seas, and in some areas is so dense it colors the water. The small creatures may be used as bait for fish. Don't eat them, though, as they are salty and contain sharp spines that will injure your stomach. They may be gathered with a tow net or improvised dip net.

A grapple for collecting and pulling in seaweed, which is edible, can be made from four heavy slivers of wood. Cut three notches near the end of the heaviest sliver, seat the other three pieces, then lash them into position. Make the line fast to the shaft by cutting three or four notches near the end and tying it tightly with canvas thread.



COMPONENTS OF A CHEMICAL DESALTING KIT

Health and Survival

Environmental hazards take a heavy toll of stranded men even when food and water are available. If you're able to evaluate the hazards, and know how to cope with them, your hardships will be lessened and your survival time lengthened.

Shelter and sleep are necessary. You will tire as quickly from loss of sleep as you will from lack of food. And, being in an open boat in the

sun from dawn to dusk is too much exposure for the average man. Rig a tarp or sail against the sun and get under its shade. Enough sun will be reflected from the water during the day to burn your skin. Don't add to this by needless direct exposure.

Sunburn prevention is easier than treatment. Many men fail to realize that the effects of serious sunburn are not felt until several hours after exposure. If you wait until your skin turns pink, or feels hot, before you cover it, you're already burned. Hazy and overcast days are sometimes the worst because there is much reflected light and little warning of sunburn. Your best protection is to keep covered as much as possible. If you get burned severely, use the burn ointment and dressing in your first aid kit.

Sunstroke is the result of direct exposure to the sun. It is normally preceded by dizziness, nausea and headache. Your face will be flushed, your skin hot and dry and your body temperature high. The best preventive is to keep your head covered or wet, and cool your body by splashing water over your clothing. For treatment, shade yourself from the sun and lie with your head higher than the rest of your body.

If you're in a cold climate squeeze out and dry your clothing and socks as soon as possible. If your feet swell, remove your shoes. Otherwise keep them covered.

Cold Weather Survival

Survival in extremely low temperatures is a matter of balancing heat loss and bodily heat production. You can balance heat loss to some extent by food intake and exercise but, since there is a limit to the amount of food you have and to your muscular activity, your main reliance for warmth must be in the reduction and regulation of heat loss. You do this by wearing the proper clothing.

Your best clothing bet consists of a number of light garments that can be taken off or put on as the need arises to regulate heating and chilling. None should be tight enough to reduce blood circulation. Never expose any more of the body than absolutely necessary, since enough heat can be lost from uncovered hands, face and head, or poorly insulated feet, to chill the rest of your body.

Ideally, outer garments should be windproof, but not so airtight they cause excessive heat production and sweating. Inner garments should act as insulators. They should be form-fitting, light, soft, and loose enough to permit escape of perspiration.



ABANDON SHIP—Greek sailors leave their sinking merchant ship in whaleboat. They were picked up by U. S. Navy ships answering call for help.

Freezing of your face, feet and hands is an ever-present danger if you're exposed to low temperatures. Don't rub frozen parts, or expose them to heat rapidly. Rubbing will break the skin and lead to infection. Thaw frozen parts slowly.

Frozen flesh is white and stiff, while milder frostbite is dark red. Wrinkle your face frequently to determine whether any part is frozen. The ears are especially susceptible to frostbite. Press your warm hands against your ears. When fingers become cold or frostbitten warm them against the skin of your body. Cup your hands around your toes if they become frozen.

Dry feathers may be placed inside your shoes or between socks, providing insulation against frostbite. A cloth tied over your face below the eyes and hanging loosely at the bottom will protect your face and allow your moist breath to escape.

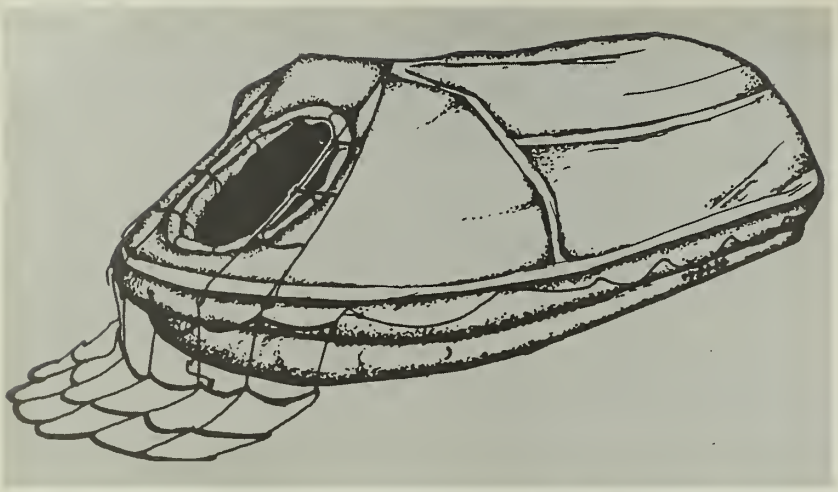
Frostbite is more likely to occur if the wind is blowing.

Long exposure to salt water may result in sores and swelling. Application of fatty substances will help prevent salt-water sores.

Immersion foot may be caused by continued wetting of the feet in cold or icy waters (60 degrees F or below). Pain is followed by swelling

ALL TOGETHER—When more than one life raft is in the area tie them together.





FIFTEEN-PERSON LIFE RAFT WITH WEATHER SHIELD

and numbness, and blisters and sores may develop. The best preventive is to keep your feet as dry as possible and to exercise them regularly. Don't wear tight boots, or socks that bind your legs. In treating immersion foot keep your legs above body level and apply cold compresses or packs, keeping a layer of dry material between the compress and your feet. Don't rub or apply direct heat, and avoid breaking the skin.

Exposure to wind, cold, glare, salt water, or a combination of these may result in eye inflammation, the first sign of which is a feeling of sand in your eyes. Protect your eyes at the first sign of soreness.

Since you're living off the sea and have little choice of food, vitamin deficiency diseases are likely to develop. Under extreme conditions there is nothing you can do about it. Although vitamin deficiency may be painful and appear serious, it disappears almost miraculously when you reach land, or are found, and obtain fresh fruits and vegetables.

Finding Land

While waiting for your rescue ship or aircraft, keep your eyes open for signs of land.

- Drifting wood or vegetation is an indication that land is near.
- Large numbers of birds also indicate land is nearby. Except for a few species, most sea birds sleep ashore. During the day birds fly all over in search of food, but when evening approaches will return to land. If the flight of birds in the late afternoon is observed, and their line of bearing followed, it will probably lead ashore.
- Fixed cumulus clouds in an otherwise clear sky are likely to have been formed over high or mountainous land. Take note of any stationary cloud, especially if moving clouds are passing by it, for this indicates land lies beneath it beyond the horizon.
- Watch for any green reflections on the underbelly of the clouds. In a lagoon the water is not only warmer, but shallower than beyond the reef, and its color more green than blue. Reflecting upwards, green waters color the clouds above.
- The waves may guide you ashore. When the wind blows constantly from one direction, as in the South Pacific, it sets up a swell at right angles. But when rollers hit an island they form a "V" around it. If you find rollers not at right angles to the wind, odds are that (barring local squalls) land is near.

Sharks

The danger of being attacked by a shark, barracuda, or some other large form of sea life depends on the locality and conditions. Sharks may be timid and wary, or they may be deadly dangerous. They are curious, and will investigate any object in the water. They are likely to attack only the dead, or the wounded and bleeding. Blood in the water attracts and excites sharks. Any flow of blood should be stopped as quickly as possible. Light colored bodies apparently attract sharks. Dark colored clothing is a good protection.

Be careful when cleaning fish at the edge of your raft, and don't trail your hands or feet in the water when sharks are present.

Cuttlefish, squid and octopus have long, powerful tentacles, but those large enough to be dangerous live in the ocean depths and are rarely encountered.

Barracuda are found in most tropical and subtropical seas, usually along coral reefs and near shoal waters. Danger from them is greater in murky water on reefs than in clear water. They are seldom encountered in the open sea.

The electric ray, or torpedo, is found both in open water and along sandy and muddy bottoms, both in tropical and temperate seas. The torpedo can give a paralyzing shock but, fortunately, is rarely encountered.

Jellyfish and Portuguese men-of-war have long tentacles that produce painful stings and severe swelling which may last several hours. The greatest danger is not from the stings themselves, but they can cause a man in the water to develop cramps, panic and lose energy, which may result in drowning. Objects on the surface resembling large bubbles should be avoided. If stung, make every effort to relax.

Whales, dolphins and porpoises are not dangerous to man.

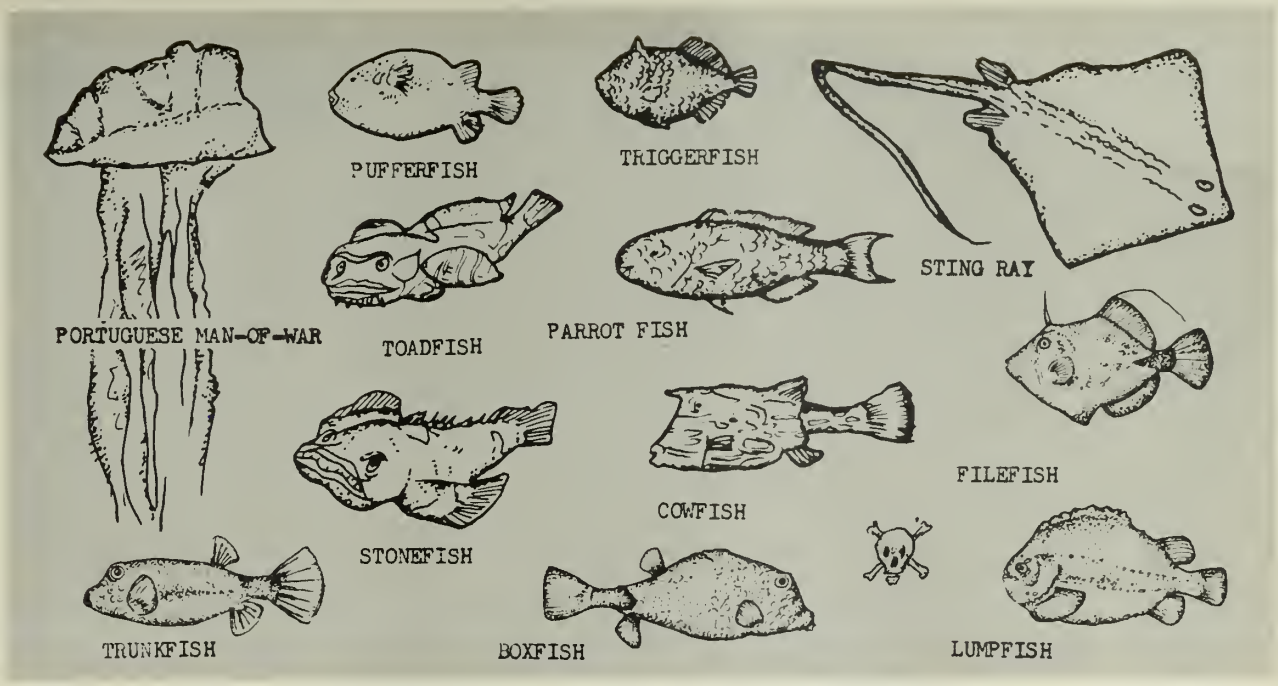
Keep Your Head

If you're in a group help, don't fight your shipmates. They are not your rivals in a struggle to survive. They are men with the same problems you have, and usually are willing to lend every assistance—in some cases at the risk of their own lives.

Continue to obey the chain of command. The establishment of leadership in a lifecraft improves your chances of rescue. The leader should set up definite procedures and schedules for rationing the available food and water, and should provide tasks to keep the group occupied. He should see to it that the ill and injured are given the best possible care, that lookout duties are taken care of, that the fullest possible use is made of signaling gear, and that as high a degree of morale as possible under the circumstances is maintained.

Morale is an important point, and good morale will help ward off certain symptoms that are to be expected of men lost at sea. Combat them in yourself and, when you observe them in others, cooperate with your leaders in helping to stop them.

A man may stand still and weep or scream for help, or fight for a place in the boat, or become sick at



DANGER—THESE FISH ARE POISONOUS, LEAVE THEM ALONE—DANGER

his stomach. Obey orders and keep busy. There is less chance you will get into such states if you are occupied.

A man may become pale, tense and agitated, and may stutter. After some time he may become delirious, or may exhibit behavior dangerous to himself and others. He may suddenly attack other men in the party. He may dive off the raft "to go below for a cup of coffee." He is liable to drink sea water or eat the few rations left on the raft. Morphine may help, or cheerful conversation may keep him interested. When necessary he must be held in restraint until his symptoms subside.

The majority of survivors do not reach such states. Many, however, will exhibit at least a strained emotional attitude. At first, on board your life craft, there may be signs of relief, elation and excitement. As time goes by, other feelings take over—uneasiness over your growing physical discomfort and speculation as to your chances of rescue. These attitudes may worsen into irritability, preoccupation, and withdrawal from the rest. Ideas of food and drink dominate your thinking.

True, living without equipment in an open boat on the high seas is perhaps the severest test of morale, but giving way to panic or despair is a certain way to kill yourself. High morale will bring you through. Don't let your thoughts and imagination become your greatest enemy. Keep fishing and experimenting to the limit.

Above all, keep your head and obey the man in charge. Remember that ships, boats and aircraft are looking for you. Maintain hope and you will be found.

—Dan Kasperick, JOC, USN

You Never Know — It Might Happen to You

You never know when the moment is awaiting you—that moment that changes ordinary, routine circumstances into trouble and places your personal safety in jeopardy.

Not that you need hang a dark cloud of doom over your head and always expect the worst, but you should be alert to the fact that the unexpected can happen, even on a routine boat ride from your ship. One illustration of this point occurred a while back when three sailors were stranded in a boat overnight in sub-freezing weather —not in some remote section of Alaska, but in the populous, Navy-infested Norfork, Va., area.

Because these men kept their heads, they survived their ordeal.

Late in the evening the three, who were crewing a 40-foot liberty boat, departed their ship and were making for pier seven at Norfolk Naval Base. En route the engine quit, and the boat started to drift.

While they worked to restart it, the boat continued to drift. They got it started a few times only to have it conk out again.

Soon they were drifting past the Hampton Roads Bridge-Tunnel. Recognizing their peril, they dropped anchor and began searching for anything they could use to signal for help. Some of the plentiful life jackets were decided upon.

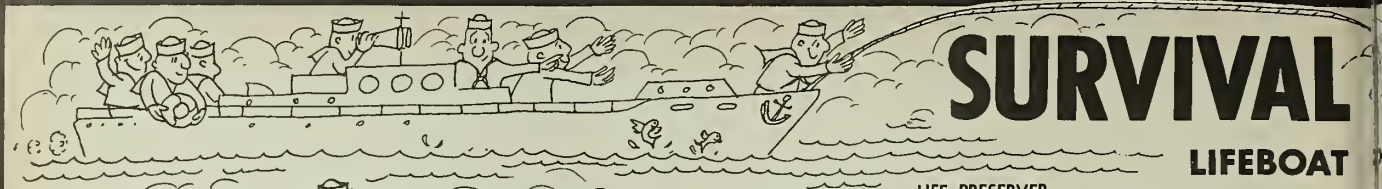
They tore up life jackets and saturated them with diesel fuel, then waved their fiery signal on the end of a boat hook. They were spotted by a bridge guard.

Although all ships in the area were on the lookout for them, almost four hours passed before they were discovered. Even then, nature and circumstances combined forces to keep them stranded longer.

The first patrol boat that started for the men developed rudder trouble. A second was forced to give up the rescue when it ran into heavy icing conditions.

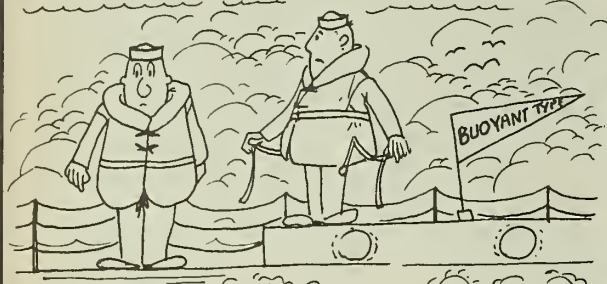
The men kept their spirits up during the cold night. They yelled at each other to remain awake.

By daybreak a helicopter was able to pick them up. They received treatment for exposure and exhaustion, and one man had frostbite, but thanks to the way they met an unexpected situation they are alive and safe today.



SURVIVAL

LIFEBOAT



LIFE PRESERVER

The Navy has two types of life preservers. One is filled with buoyant moteriol, ond the other is the inflotoble type. The filled preserver has cloth topes to pull tight for a close fit. Leg straps prevent it fram riding up while you ore in the woter. A body strop ocrass the chest helps toword o snugger fit ond pravides o hold for lifting you out of the woter. The strop con also be used to ottoch yourself to lifecraft or to other men in the water. Alwoys put the iocket-type life preserver an over outer clothes.

The inflatoble preserver is narmolly corried in a pauch held in ploce at your bock by o web belt oraund your woist. The inflotoble preserver is blown up either by a corbon dioxide cylinder or by mouth. It is equipped with o lifting horness, o woist belt, ond o wood toggle ond line for ottoching yourself to o lifecraft or onother survivor. When you need the preserver, pull the pouch oround to the front, remove the preserver from the pouch, slip it over your heod ond inflôte it. A "one-shot" infloter, which hos the CO_2 cylinder screwed into it, is locoted within eosy reoch of your hond but not in o position where you might discharge it by mistoke. To inflote the preserver, grosp the lonyord ottoched to the infloter and jerk downword os far os possible. This will releose the carbon diaxide gos into the chomber. If still mare buoyoncy is necessory, it moy be occomplished orolly.



If the order is received to leove the ship, ga over the side fully clothed and from the lowest port of the windward side, if possible. If you must jump, do so feet first, legs together and body erect. If yau are jumping into flames, do not weor o filled preserver, or if you have an inflotoble type, don't inflote it until yau ore cleor of the flames. However, be sure your life preserver is fastened securely, including the leg strops. If you are wearing a jacket-type preserver, ploce ane hand firmly on your shoulder to keep the preserver from riding up shorply when you hit the water; in a long drop, the force of impact might hurt your chin or neck. Hold your nose with your hand. If you are wearing an inflatable preserver, inflote it after you ore in the water.

LIFEBOAT

The Navy's 15-person CO_2 inflatoble lifeboat is the most common and efficient inflatoble boat used oboard ship today. It is light, compoct, easily stowed and con be lounched quickly. The craft is inflated, either on ship or in the woter, by pulling a quick-release cable on the outside of the carrying case.



Other geor on the boot consists af autboord lifelines, boarding nets, grob lodders, canopy, seo anchar, roin cotcher tube, paddles, survival kit ond o rodar reflector screen.

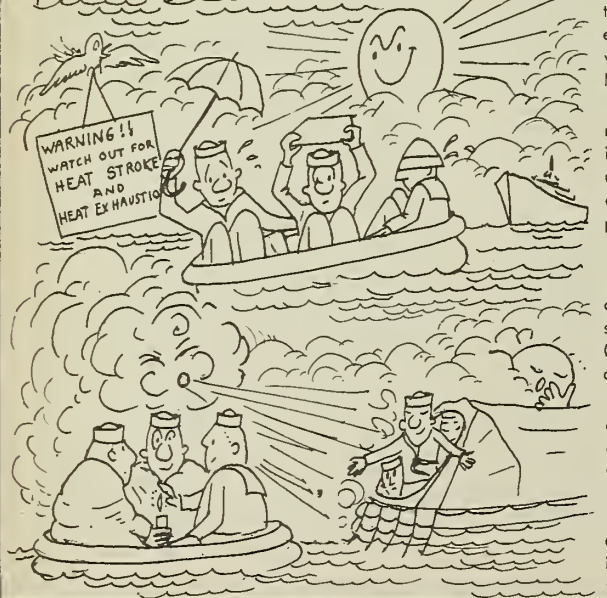
The boat is infloted by the dischorge of CO_2 (carbon dioxide) cylinders. An octuoting coble from one of the cylinder valves leads to a pull-hondle outside the lifeboot corrying case. A coated fabric guard flap over the pull-hondle prevents accidental discharge of the cylinders. The thwart tubes ond the floor are inflated by hand pumps which are stowed in pockets attoched to the conopy suppart tubes.



When boarding the croft, the first man uses the baording net ond grob lodders, entering in the reor. He remains ot the stern, helping other men aboord, while the second mon goes forward and opens the other entrance. This man also helps others aboard and sees that the sea onchor is not entangled. When all men are safely aboord, the carrying case is retrieved ond the poddles are broken aut. After paddling a safe distonce from the ship, the sea anchar is cast out to reduce drift.

LEADERSHIP

In a crisis, leadership con be the determining foctor in survivol. The mentol ond emotianal stobility af the crew in o life roft is of utmost importance if they are to survive. Caaperation is vital. Once safely oboard a life roft, survivors reoct to circumstances in different ways. There may be the feeling of relief, elation, excitement, chonging to withdrowal, hopelessness ar shock.



The events surrounding o colomity at sea pose o reol chollenge to individual and group morole. The mood af depression can be overcome or offset by good leadership. A group that is well led is mentally mare copoble, and its chances are greotly improved. The leader acts as umpire in disputes; he uses simple devices, such as jaking and encouragement, to ward off dongerous self-preoccupation. One additional pointer—if you are senior man, it is very important that you allacate some job, however small, to each mon aboord.

EXPOSURE

Clothing—For protection from the elements, the more clothes you hove the better off yau'll be. In the case of abandoning ship, a man should wear as much clothing os possible. In trapical waters, the greatest dangers are sunburn, heat stroke and heat exhaustion. (Refer to first aid centerspread.) In polar waters the greatest dangers are the effects of the cold and excessive bady cooling.

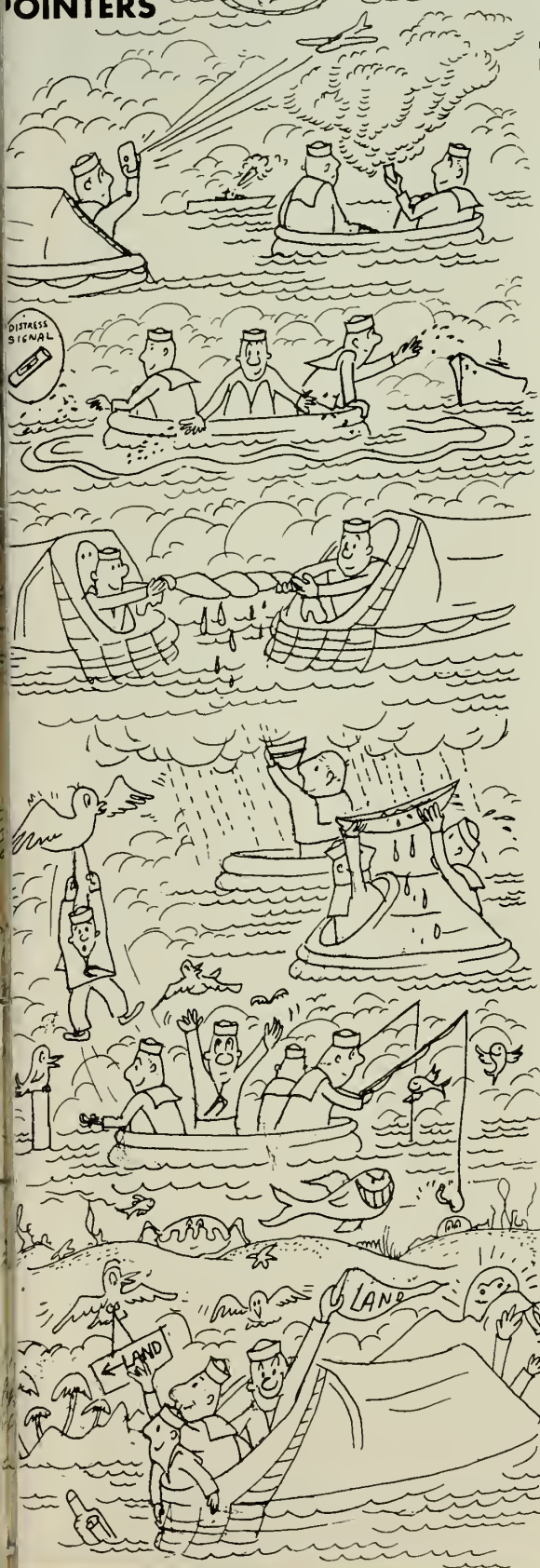
However, the length af time ane can survive in cald water varies fram ane person to anather. All passible measures shauld be taken to keep clathing dry, since wet apparel affers na protectian. Huddling tagether and limited exercises alsa help in keeping warm. Other dangers from the cold are frostbite and immersian faat. (Refer to first aid centerspread.)

EQUIPMENT

Each inflatable boat is equipped with three cantainers packed in the carrying case. The carrying case is attached to the boat by a lanyard. The carrying case should be retrieved immediately. Besides food packets and cans af drinking water, the containers alsa have the fallawing equipment:

AT SEA

POINTERS



SEA MARKER DYE—When sprinkled on the water, the powder turns yellow-green and makes it easier for seorchers to spot survivors. Depending on sea roughness, the color con last up to four hours and con be seen for three miles. The dye is effective in bright moonlight also.

THE REPAIR KIT—Provides sealing clamps and tube patches used to seol punctures thot may occur in the boot.

SPONGES—Are used to keep the interior of the croft dry.

SIGNAL MIRROR—The mirror is most effective when the sun is shining. Its purpose is to reflect a beam of sunlight toward o ship or plane to arouse attention. When visibility is good, the reflection con be seen from three to five times forther away than the lifeboat itself.

SIGNAL WHISTLE—Can be used to ottract attention ot night or in o fog. It can olso help in attrocting survivors to the boot.

SIGNAL KIT—Each of the 12 signol tubes in the kit can be used os o night or day flore. Each end is labeled and, in addition, the end for night use is serrated. Flores can be seen for only two to four miles, so they should only be used when a ship or plane is in sight.

THIRST

Thirst—Drinking woter is the one reolly essential need for survival. The inflotoble lifeboat provides 50, 10-ounce cans of drinking woter. It is imperotive that rationing of this water begin ot once, since lives may depend on it. Men without food, but with water, moy live for 30 days or more. Although o man normolly drinks a quort of water eoch day, he may survive on one pint a day. Rationing should continue until the woter supply is down to the lost con. When this occurs, only smoll sips should be token.

How to conserve body woter by reducing evoporotion:

- Avoid excessive perspirotion; perform no unnecessory exertion.
- Remove (but do not discord) oll cothes except those necessory for protection.
- Expose body to breeze as much os possible.
- Keep clothes wet with sea woter during doylight. This keeps the body cool by evaporation of water rather thon perspirotion.
- Rinse accumuloted salt from clothes doily; dry before sundown.

Obtoining water—when it roins use every ovailoble means to cotch the woter, and after this is done, drink slowly all the woter you con.

Desolting Kit—Five chemical desolting kits ore provided in each lifeboat. Eoch kit consists of o metol container, seven wropped briquette-shaped chemicol blocks, a length of mending tape, ond a plastic bag for processing the woter to be desolted. Each chemical block mokes about one pint of drinkoble woter, the normol minimum requirement for one man per day. These kits ore for emergency use only and should be used only as a last resort. Extreme core in rotioning must be exercised when it becomes necessary to use them.

HUNGER

Hunger—Food is much less importont thon water for survivol. Also, the lack of food helps retain your body's woter bolance. Emergency rotions ore high in sugar and storch and low in protein. This combination decreoses the amount of woter lost by the body.

Each food packet on the lifeboot contoins starch jelly bars, mint candy toblets and chewing gum tablets. The discomfort of thirst is mosked by the chewing gum. There is a total of 15 food pockets to eoch corton, and each boot is supplied with 5 cartons. This mokes a total of 75 food packets per boat. The cortons are marked to show the proper ration ollowance, which is one food packet per mon per doy. Therefore, 15 men on o lifeboot con be adequately nourished for 5 days.

In addition to these rotions, cigorettes and matches are provided in each cartoii. No more than two cigorettes a day should be given to eoch man. Rotioning of food should begin ot once. Food packets should be issued three or four times daily; in cold climates distribution should be mode every two hours.

In addition to the rotion tablets, fish, birds ond marine life and vegetotion can be food sources. Improvised fishing equipment can be made from your clothing, pins, clips, wires ond other equipment. Birds may be caught while lighting on your roft or with o hook towed behind the roft. Almost all seaweed is edible ond is rich in iodine, minerals ond vitomins. Care should be token because some seoweeds are violent purgotives.

NAVIGATION

The general rule is that survivors ore more likely to be found if they do not attempt trovel. It is not a good idea generally to row or paddle your roft, because this results in exhaustion. If you drift, search plones can look for you along the route of lastknown position ond ollow for currents os the doys go by.

Signs of Lond:

- Fixed cumulus clouds in clear sky.
- In the tropics, o greenish tint in the sky.
- In the Arctic, ice fields or snow-covered lond indicated by light-colored reflections on clouds.
- In fog, mist, rain, or ot night, noises or odors may indicote lond.
- Birds.
- Miroges (will disappear or chonge appearance at slightly different heights).

DO battle dressing station don't DO

NAVY PRIMER

MOST ACCIDENTS Navymen will witness during their lifetime will occur within quick reach of competent medical assistance.

In an emergency in which someone is hurt, what should you do?

First, get competent medical help. If that is not possible and first aid must be given, *know what you are doing.*

ALL HANDS does not wish to convey the idea that it is a simple matter to administer first aid. Quite the contrary, first aid is an art which must be studied and practiced.

Frequently, it is the art of knowing enough to wait for help because doing the wrong thing, particularly where broken bones are concerned, can be worse than doing nothing at all.

The following information does not replace the intensive training of a first aid course. It can only serve as a refresher, and as a warning about the results when the wrong kind of action is taken.

The principles of first aid develop generally along two lines.

1. Know what *not* to do.
2. Learn what to do, when, and in what order to do it.

Sometimes an injured person is suffering from a number of conditions. What is the order of action?

- The first step is to stop hemorrhage.
- The second is to insure that the victim is breathing; if he isn't, initiate action to get him breathing again.
- The third step is to prevent or minimize shock.
- After these matters are taken care of, more specific action will be called for, depending on the injuries involved.

BLEEDING

Like everybody else, a Navyman has only about five quarts of blood in his veins. He can normally lose a pint of it without serious consequences. (As you know, this is the amount usually taken in a blood donation.)

The loss of a quart of blood, however, will usually cause shock, and the greater the loss of blood, the deeper the shock. If he loses half the blood in his body, death usually results.

If a man's vein is cut, the blood usually escapes in a steady, even flow. If an artery is cut near the surface of the skin, the blood will squirt in synchronization with the beat of his heart. If the severed artery is buried deep, blood will appear from the wound in a steady stream.

Regardless of where the blood is coming from, it must be stopped.

There are several methods:

The best way to stop bleeding is to apply pressure directly to the wound—preferably with a sterile bandage. If this is not available, use any cloth, placing it in a wad over the wound and fastening it in place.

If the pressure furnished by the bandage doesn't do the job, press on it with your hand.

If the hemorrhage is severe, don't worry too much about the chances of infection; just get the bleeding stopped. *Direct pressure* is the first method you should try. If this fails, use the following methods in the order given below. But first, let's expand on the subject of pressure points.

Pressure points—you do not need first aid materials for this method; you do need to know where the pressure points are. The object of direct pressure is to shut off the flow of blood through the artery by pressing it with your finger or hand against the bone. (The location of the pressure points is shown in the illustrations on the centerspread, pages 32 and 33).

- ***Face***—If a man is bleeding on the face below the level of his eyes, pressure should be applied in the area of the lower jawbone. To find the pressure point, start at the angle of the jaw and run your finger forward along the lower edge until you feel a small notch. Apply pressure to this notch.
- ***Shoulder***—If the bleeding is in the shoulder or the upper part of the arm, put the pressure on the back of the collarbone. You can press down against the first rib or forward against the collarbone.
- ***Arm and Elbow***—For bleeding between the middle of the upper arm and the elbow, pressure should be applied to the body side of the arm about halfway between the shoulder and the elbow. Bleeding from the lower arm can be controlled by applying pressure on the elbow.
- ***Hand***—Bleeding from the hand can be controlled by pressure at the wrist. If it is possible to hold the hand up, the bleeding will be easier to stop.
- ***Foot***—Elevating a bleeding foot is just as helpful as elevating a bleeding hand. The pressure point in the ankle should be grasped to stop blood flow (see pictorial centerspread).
- ***Thigh***—Pressure applied to the middle of the groin is often sufficient to stop bleeding from the thigh.
- ***Scalp***—To check the flow of blood from the scalp or the temple, press your finger against the main artery to the temple at a point just in front of the ear.
- ***Neck***—To check bleeding from the neck, apply pressure below the wound just in front of the prominent neck muscle. Press inward and slightly backward, compressing the main artery of that side of the neck against the bones of the spinal column. (Warning: Back and spine injuries are most serious. Any movement can be fatal to the victim. See below.)

Using a pressure point to control neck bleeding should be used only as a last resort since there is danger of pressing the windpipe and choking the victim.

- ***Leg***—Bleeding between the knee and the foot can be controlled by applying firm pressure against the artery behind the knee. Check the illustrations.



ON FIRST AID

PRESSING the artery between the victim's bone and your finger can be a tiring business. A man administering first aid may find it tough going after more than 15 minutes. If some other method of controlling bleeding must be found, check the following pointers.

Sometimes the answer is a compress held in place by a bandage. At other times, a tourniquet is used—but *only* as a last resort. Once applied, it cannot be removed except by a medical officer.

What is a tourniquet? It is a constricting band which is used to cut off the supply of blood to an injured limb. In first aid, the "Don't's" are often more important than the "Do's"—this applies particularly to tourniquets. Obviously, a tourniquet can't be used on the neck, head or body without causing even greater injury or even death.

Basically, a tourniquet consists of a pad, band and a device for tightening the band. Its purpose is to compress the blood vessels so the flow of blood will be stopped. If it is held on too long or is improperly applied, it can result in the loss of a limb.

When properly applied, a tourniquet can be left in place for a variable length of time without undue risk. Some advocate the periodic loosening of a tourniquet to provide for the flow of blood to the injured limb. But the point to note is that if the injury is serious enough to warrant the use of a tourniquet, the man has probably lost a considerable amount of blood. To permit further loss of blood might result in death.

A tourniquet is in Navy first aid kits. In addition, it can be improvised from materials at hand—a belt, stocking, flat strip of rubber, neckerchief—any long flat material may be used in an emergency. However, such materials as rope, wire or string should not be used because of the danger of cutting the flesh.

Also needed with a tourniquet is a pressure object. This can be any round, smooth object such as a compass, a roller bandage, a stone or a rifle shell.

A tourniquet should always be applied between the wound and the trunk and as close to the wound as possible. The pressure object goes under the band and must be placed directly over the artery.

If the flow of blood continues after the tourniquet is applied, it means the pressure object is not in the right place.

Keeping the victim's lifeblood in his body is the primary necessity in administering first aid. The second most important is to restore breathing if it has stopped. This is done through artificial respiration.

ARTIFICIAL RESPIRATION

A man may stop breathing for several reasons: Because his air passages are blocked; because there is insufficient oxygen in the air or the blood is unable to carry oxygen to the body cells; the breathing center in the brain is paralyzed or the body is so compressed that breathing is impossible.

Before beginning artificial respiration, the condition which makes it necessary should be removed. If the air passages are blocked, free them. If there isn't enough oxygen in the air, move the victim to a place where there is oxygen. If the victim is buried to the point that his chest can't expand, get him out.

Artificial respiration restores breathing. If the victim *is* breathing, let him continue to do so under his own power.

If the victim isn't breathing, it doesn't necessarily mean he's dead. In fact, artificial respiration shouldn't be abandoned in less than four hours.

When breathing stops, the heart may well continue circulating the blood which carries oxygen to the body cells. There will be a sufficient supply of oxygen to keep the victim's body cells alive for awhile, but it is important to begin artificial respiration as quickly as possible.

There are several methods of administering artificial respiration (see centerspread). The most effective is the mouth-to-mouth method which consists of forcing air directly from your lungs into those of the victim.

Anyone who is breathing normally, uses only a fraction of the oxygen he breathes to sustain life. Consequently, when he exhales, he expels the unused oxygen as well as carbon dioxide. It is the unused oxygen which may mean the difference between life and death to a victim of asphyxiation.

Mouth-to-Mouth Method—There is a standard procedure to follow before beginning any type of artificial respiration. The victim's mouth should be cleared of any foreign matter such as mucus, chewing gum or false teeth.

This is done by turning the victim's head to one side, opening the mouth and sweeping your fingers through it, removing foreign matter and bringing the tongue forward in the same motion.

To administer mouth-to-mouth artificial respiration, clear the victim's mouth and cover it with your own. Seal up any leaks as well as you can with your hand and exhale forcibly into the victim's mouth.

At the same time, keep a hand on the victim's stomach. This will prevent the precious oxygen which you exhale from going to the victim's stomach and direct it into his lungs where it will do some good.

If it is not possible to use this method of artificial respiration (due to facial injuries) another lifesaving technique is the back-pressure, arm-lift method.

Back-pressure, Arm-lift—To use this system, place the victim so he is lying face down. If he is on a sloping surface, his head should be slightly lower than his feet.

Bend both the victim's elbows and place one of his hands on the other. Turn his face so he is resting upon his hands and clear his mouth.

Kneel on one knee facing the victim, placing your knee close to his head. Place your other foot near his elbow. If you want to kneel on both knees, one knee should be located on each side of the victim's head.

Place your hands on the middle of the victim's back *just below the shoulder blades* so your fingers are spread downward and outward with your thumb tips just about touching.

Rock forward until your arms are about vertical and allow the weight of your upper body to exert a slow, steady, even pressure on your hands until you meet a firm resistance.

This compresses the victim's chest and forces the air out of his lungs. Be sure you exert pressure almost directly downward and do it steadily without excess pressure.

When you release the pressure, do it quickly, peeling your hands from the victim's back. Rock slowly backward to allow your arms to come to rest on the victim's arms just above his elbow. As you rock backwards, draw the victim's arms upward and toward you. Keep your arms straight while doing this.

Lift the victim's arms until you feel resistance and tension at the shoulders. The arm lift pulls on the chest muscles, arches the back and relieves the weight on the chest so that air is sucked into the lungs. You then lower the victim's arms and you have finished one full cycle.

The cycle should be repeated about 12 times a minute (five seconds per cycle).

Hip-lift Method—Another method which can be used if the victim has been injured in the chest, neck, shoulders or arms is the hip-lift method. It's a good method to use when there isn't enough room to use the method described above, but it is tiring.

The victim should be face down with his elbows bent and his face turned to one side and resting on one hand. The other should be stretched above the head.

Clear the victim's mouth and kneel on either knee, straddling the victim at the level of the hips so your heel is directly opposite your kneeling knee.

Place your hands on the middle of his back just below the shoulder blades so your fingers spread downward and outward and your thumb tips just about touch.

Rock forward, allowing the weight of your upper body to exert slow, steady and even pressure downward until your hands meet resistance. Release the pressure quickly by peeling your hands from the victim's back.

Rock backward and let your hands come to rest on the victim's hips well below the waist. Slip your fingers underneath his hipbones and lift without bending your elbows. Lower the victim's hips to end the cycle, repeating it about 12 times per minute.

Navymen who work around electricity should know how to administer artificial respiration while suspended from a pole.

Since time is of the essence, there isn't enough of it to lower a man to a more convenient position. Every minute lost decreases his chances of survival.

The first thing to do is to disengage the victim from the power circuit and allow him to hang from the pole from his own safety belt.

Take a position below the victim and climb upward, working your safety belt between the victim's legs so that eventually he is straddling it.

When the victim's weight is completely on your safety belt, push his head forward toward the pole; pull his tongue forward and clear his mouth.

Put your arm under the victim's arms and around his waist and place your hands on his abdomen so your fingertips just touch and your thumbs are just below his lower ribs.

Compress the victim's abdomen with your arms and hands and push upward. By the end of the compression stroke, your hands will be cupped and your fingers will be depressing the victim's abdomen just under the ribs.

Release the pressure quickly to complete the cycle. You should complete one cycle about 12 to 15 times per minute until the victim is breathing naturally.

How to Save a Life

Navymen frequently live in an environment where change can be sudden and dangerous.

What may be smooth sailing at 1400 may be a violent storm at 1600. A deck that is level one minute may well reach a radical angle the next. What is dry now may, in a moment, be awash. The man working beside you may, in an instant, be in need of your assistance. Can you give it?

One day, you may be faced with the knowledge that you must do something to save a life or a limb. If you do the wrong thing, it may only make matters worse.

The logical remedy then, is to learn to do the right thing. In this case, learn how to administer first aid.

FRACTURES

Anyone who leads an active life knows a broken bone is not hard to come by. For men at sea, a fracture is a greater possibility than ashore because you are on a moving platform, often in confined quarters, surrounded by hard steel, or on slippery decks surrounded by rough seas.

Even a slight fracture is not someting to treat lightly. Fortunately at sea in an emergency, there is medical help close at hand. If it isn't here are some basic *do's* and more basic *don't's*.

To keep you from being confused by terminology, it might be will to interject at this point the information that a broken bone is a fractured bone. There are two kinds of fractures—simple and compound.

A simple fracture is sometimes difficult to detect because it may mean the bone is only cracked or, as in the case of the forearm, only one of two bones is broken.

Compound fractures are easier to spot because the soft tissue and the skin have been punctured either by something external (a bullet, for instance) entering the skin and soft tissue or the bone itself may be protruding through the skin.

The object of first aid in both cases is to immobilize the bone so that no further damage is done. If the fracture is compound, your first object is to stop the bleeding and clean the wound.

Bones are immobilized by means of splints which can

be made of almost anything so long as it is strong, rigid and reasonably lightweight.

A splint should be wide enough so the bandage which holds it in place doesn't pinch, and it should be well padded to compensate for the curvature of the body. If there isn't sufficient padding, the broken bone is liable to move and damage tissue, blood vessels or organs.

If the victim can be seen quickly by a medical officer, splints can be applied over clothing which will usually form the necessary padding.

If some time will elapse before the victim can be seen, cut the clothes away before splinting the bone. If two men are available to give first aid, one should hold the splints while the other fastens them.

Try to keep the victim's fingers and toes exposed. They're a good index as to whether the splints are too tight. If circulation seems to be slowed down, making the fingers or toes cold and blue, loosen the splints.

As was mentioned before, a broken bone isn't always easy to detect. If there is doubt, the victim of an accident should be treated as if he had a fracture. He might be saved further and more serious injury by doing so.

As stated above, before giving first aid for fractures, you should stop any serious bleeding and treat the victim for shock. Methods for stopping bleeding were given earlier. The method of treating shock consists essentially of keeping the victim warm, but not allowing him to become overheated. If possible, his head should be lowered slightly. (See centerspread.)

There are two prohibitions concerning fractures.

- *Don't try to set the broken bone.* Your job is simply to immobilize it to prevent further damage. The other prohibition is related to the first.
- *Don't try to force a protruding bone back in place.* Doing so is very likely to do further damage to the victim.

Forearm—As mentioned before, a broken forearm may be difficult to detect because there are two bones involved and only one may be broken or cracked.

If you suspect the forearm is broken, put well padded splints on the top and bottom of the arm. The splints should be long enough to extend from the elbow to below the wrist. Use bandages to hold the splints in place.

Put the forearm across the chest so the palm of the hand is turned in. Support the arm in that position with a wide sling so the hand is raised about four inches above the level of the elbow.

Upper Arm—If the upper arm is fractured, the treatment will depend partly upon the location of the break. If it is near the shoulder, place a pad or folded towel in the armpit, bandage the arm securely to the body, and support the forearm in a narrow sling.

If the fracture is in the middle of the upper arm, use one well-padded splint on the outside of the arm extending from the shoulder to the elbow.

Fasten the splinted arm firmly to the body and support the forearm in a narrow sling.

Thigh—A fractured thigh can be more serious than some other fractures. The powerful thigh muscle pulls the injured leg up, making it shorter than the other leg. This increases the possibility of serious damage to the blood vessels and nerves and shock is likely to be severe.

If a thigh fracture is compound, *stop the bleeding* and treat the wound before treating the fracture.

Carefully straighten the leg and apply two splints—one on the outside and one on the inside of the injured leg. The inside splint should reach from the crotch to the foot.

Fasten the splints in five places: around the ankle; over the knee; just below the hip; around the pelvis and just below the armpit. Both legs should be tied together to support the injured leg as firmly as possible.

Leg Fracture—The lower leg, like the lower arm, contains two bones and, unless both are broken, it is sometimes difficult to tell whether or not there has really been a fracture. If both are broken, however, the fracture is likely to be compound.

If the fracture is compound, bleeding should be stopped and the wound cleaned. Straighten the leg and apply three splints—one on each side of the leg and one underneath. The splint should be exceptionally well padded under the knee and at the knee bones on either side.

A pillow and two side splints can be used in a fracture of this type by placing the pillow beneath the injured leg and bringing the edges of the pillow around to the front and pinning them together. The splints are then placed on each side and fastened in place over the pillow wtih strips of bandage.

A fractured kneecap can be immobilized by placing a padded board at least four inches under the injured leg. The board should reach from the buttock to the heel. Bandages should fasten the leg to the board just below the knee, just above the knee, at the ankle and at the thigh. The knee itself should not be covered.

Collarbone—A man with a fractured collarbone usually isn't difficult to spot. He carries his injured shoulder lower than the uninjured one and frequently can't raise his arms above shoulder level.

He characteristically tries to support his injured shoulder by holding his elbow on that side with his other hand.

The actual point of fracture, in fact, can often be seen since the collarbone lies close to the surface of the skin.

To immobilize a broken collarbone, bend the victim's arm on the injured side and place the forearm across his chest with the palm of his hand turned in.

The hand should be raised about four inches above the level of his elbow and the forearm should be supported in this position by a sling.

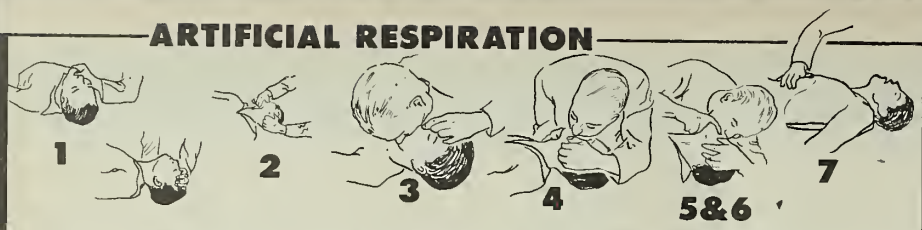
Rib Fractures—A fractured rib is usually painful at the point of fracture and may cause the victim to breathe in a shallow, gasping way. The greatest danger in this type of fracture is from the rib's loose end puncturing a lung.

Broken ribs can be immobilized if they are causing the victim undue pain by placing a bandage around the upper part of the chest and tying it in a loose knot on the victim's uninjured side.

The second and third bandages should be placed a

(*Continued on page* 34)

ARTIFICIAL RESPIRATION



The purpose of artificial respiration is to force air in and out of the lungs in rhythmic alternation, until natural breathing is reestablished. Artificial respiration should be continued for at least four hours, unless the natural breathing is restored or a medical officer declares the victim dead. Remember, a subject—in many cases—has such a weak pulse that it cannot be detected, and his face may turn a bluish black. Sometimes the subject's body becomes stiff and rigid and this can be mistaken for the rigidity of death. Some people have been saved after as much as eight hours of artificial respiration.

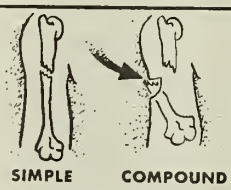
This method is the most practical for emergency treatment, giving a far greater exchange of air, and it is very simply done.
1. Clear mouth and throat of subject. Wipe out any obstruction with fingers or cloth.
Place subject in a face-up position, kneeling at his side facing his head.
2. Place fingers under angle of subject's chin, thumb in corner of his mouth. Lift the jaw upward. Tilt head back to extend the neck. This will open and align the air passage.
3. Pinch nostrils closed (except with an infant) then place mouth over subject's mouth and form a tight seal with lips. Mouth must be wide open to completely seal the open mouth of subject.
4. Blow (puff for infant), exhale firmly into victim's mouth until chest rises. If no response, reposition head and improve support of the lower jaw.
5. Remove mouth and inhale. During this period rescuer should hear and feel escape of air from subject's lungs.
6. Repeat steps 4 and 5 (12-18 times per minute—20 times for children).
7. Remove air in subject's stomach periodically (between breaths) by placing hand over pit of the stomach and pressing air out.
8. To prevent dizziness, rescuer should pause momentarily after each minute (12-18 breaths) and exhale normally. If dizziness persists rescuer is working too fast.



NOTE: "Back Pressure Arm Lift" is used only when facial injuries make "Mouth to Mouth" method impossible.
Clear mouth and throat of subject. Wipe out any obstructions with fingers or cloth. Insert airway if available.
Place subject in a prone (face-down) position. Kneel on one knee on either side of subject's head.
Bend subject's elbows and place his hands, one upon the other. Turn his face to one side, lift jaw upward and toward you and "hook" it over his hands to extend his neck.
Place palms of your hands on subject's back, heels of hands lie just below a line running between the armpits, fingers pointing down and outward.
Rock forward until arms are vertical, allowing the upper part of the body to exert slow, steady pressure downward on hands. Keep elbows straight.
Release the pressure, avoiding a final thrust, and rock slowly backward, grasping the subject's arms just above the elbows.
Draw his arms toward you, enough to feel resistance in his shoulders, keeping your elbows straight.
Rock forward, dropping subject's arms gently to the ground, and repeat steps four through seven (about 12 times a minute).

FRACTURES

There are two main types of fractures—a simple fracture in which the injury is internal, and a compound fracture where the injury is open, and the skin is broken. The compound is more serious. If you are required to give first aid to a person who has a fracture, you should follow these general rules.
If there is any possibility that a fracture has been sustained, treat the injury as a fracture.
Do not move subject until the injured part has been splinted, unless you move him to save his life or prevent further injury.
Do not try to locate a fracture by grating the ends of the bone together.
Do not attempt to set a broken bone.
Apply splints, being very careful in straightening long bones, such as those in the arm or the leg. If the protruding bone ends have dirt on them, clean with a sterile cloth. Remember, a simple fracture can turn into a compound fracture with rough handling.
If the fracture is compound there will be bleeding and this, of course, must be stopped before application of the splint. Stop bleeding by direct pressure. If bone end is protruding, straightening the limb may draw it back into place. Never attempt to force the end of the bone into place. You may use gentle traction by pulling gently with your hands, to get limb back into position. Apply the splint, then get medical assistance.



SYMPTOMS

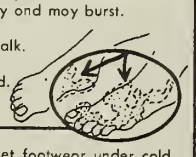
1. Pain and tenderness
2. Loss of motion
3. Crepitus (creaking or crackling).
4. Motion at points other than joints.
5. Swelling
6. Deformity (angulation)
7. Discoloration of the skin (after several hours).



FROSTBITE

A condition most likely affecting cheeks, ears, nose, chin, hands and feet. The first symptom usually is blanching followed by intense pink color. With continued exposure codeverous blanching will set in. In thawing, the part affected assumes intense red color, swells rapidly and rises in temperature. Blisters, normally present, grow rapidly and may burst.

1. Get subject into warmest available place. If feet or legs are affected do not allow him to walk.
2. Immerse injured part in a warm bath for about 10 minutes. Dry carefully.
3. Cover subject but not the affected area. Elevate the affected area slightly. Get medical aid.



IMMERSION FOOT

Immersion foot is caused by prolonged standing or crouching and the continued wearing of wet footwear under cold conditions. The result may be extensive damage to the parts affected—usually the knees, buttocks, hands and feet. This condition occurs in cold and subtropical waters. The first stage starts with the extremities becoming numb. Swelling is noticed after several hours and the skin, which is at first red, becomes pale, silky yellow, mottled blue, or even black.

Keep feet and bottom of boot dry, if possible. Remove socks, dry feet, apply oil or grease, but do not replace socks or shoes unless they are dry. Avoid cramped positions by frequent exercises and the temporary elevation of the feet.

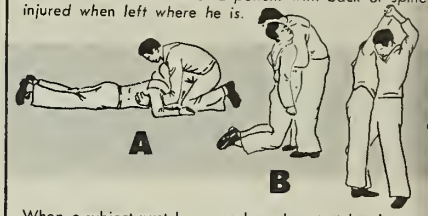
Get subject off his feet; expose affected parts to air. Warm, dry air is most beneficial. Get medical care as soon as possible.

POINTERS

REMEMBER: First Aid is an emergency measure only.

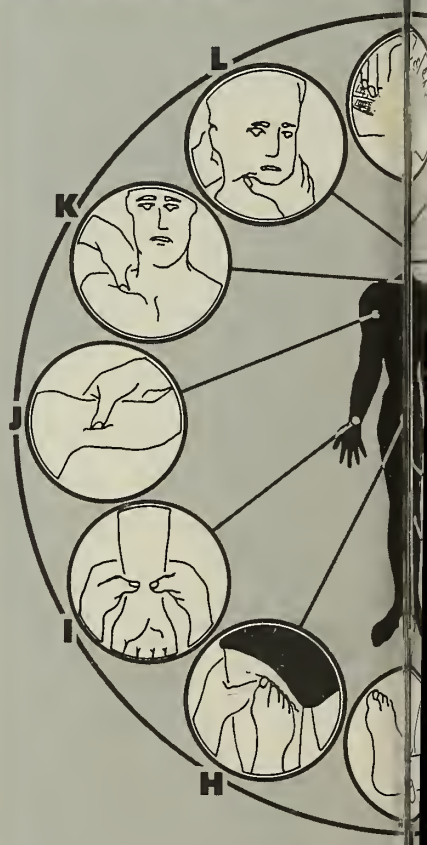
IMPROVISED T

DANGER—DO NOT MOVE patient with back or spine injured when left where he is.



When a subject must be moved, and a stretcher is not a will help as a method of transportation. Turn the subje Kneel on one knee at his head, facing him. Pass your he sides and clasp them across his back. Raise the subject to his back.
Raise the subject to a standing position, and stick your r subject's right wrist in your left hand and swing his arm Put your right arm between the subject's legs. Stoop quic trotion D. Grasp the subject's right wrist with your right free. The procedure for lowering the subject is shown in i

PRESSURE POINTS FO



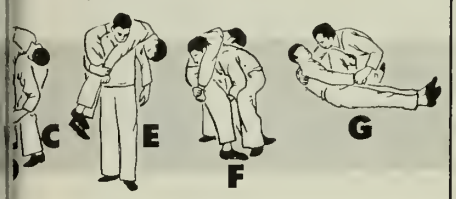
A. Direct pressure is the first method to use when trying t cleanest cloth available, folding into wad to be placed dir
B. In temple or scalp bleeding compress main artery to th
C. In neck bleeding apply pressure below wound in front o Do not apply pressure at this point unless absolutely esse windpipe.
D. Bleeding from lower arm (forearm) can be controlled b
E. In some cases, bleeding in leg wounds can best be cont shown. However, the artery is deeply buried in heavy mu
F. Bleeding between knee and foot may be controlled by
G. Elevation of foot is most helpful in controlling bleedin
H. To control bleeding from thigh, apply pressure in middl to surface.
I. Bleeding from hand can be controlled by applying pre
J. Pressure of artery against bone or inner (body) side of between middle of upper arm and elbow.
K. Bleeding in shoulder or upper part of arm can be co first rib or against collarbone.
L. For facial bleeding below level of eyes, run finger along

I FIRST AID

roper medical attention to subject as quickly as possible.

NSPORTATION

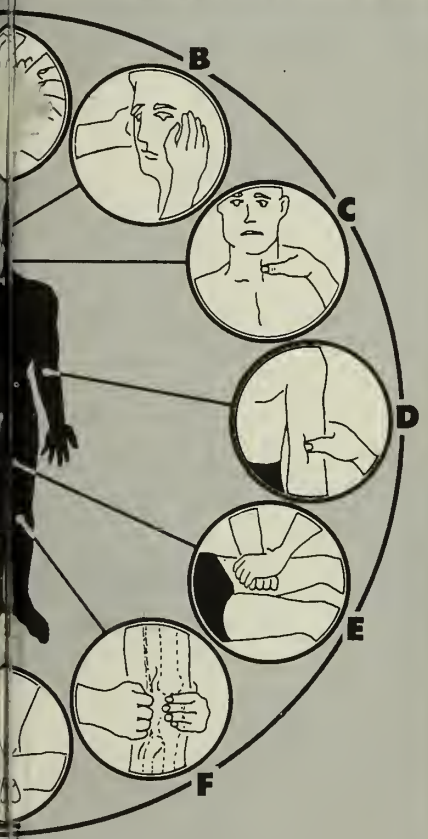
Move a patient only if he will die or be more seriously



le, it is necessary to improvise. The illustrations above ot he is lying flat, face down, as shown in illustration A. nder the subject's armpits, then slide your hands down his tees, as shown in illustration B. Take a better hold across

g between his legs as shown in illustration C. Grasp the d the back of your neck and down your left shoulder. d pull the subject across your shoulders, as shown in illus- ons F & G. Straighten up, as in Illustration E. Your left hand is now

ONTROL OF BLEEDING



rol hemorrhage. If you don't have a sterile dressing use over wound, then apply pressure.
ple against skull bone just in front of ear.
minent neck muscle, pressing inward and slightly backward.
since subject is in great danger of choking from pressure on

lying pressure at elbow.
d by applying pressure on the upper thigh with closed fist as making compression of artery against bone difficult.
sure in back of the knee.
pply direct pressure at ankle.
roin. Artery at this point lies over a bone and is quite close

at the wrist holding arm in the air.
halfway between shoulder and elbow will stop bleeding

by applying pressure in back of collarbone, pressing down

r edge of jawbone until you feel notch—apply pressure.

TOURNIQUET



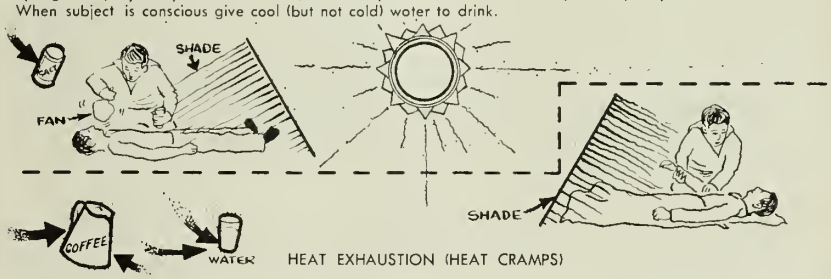
Whenever possible, to stop bleeding, apply direct pressure of your hand, firmly but gently, at the proper pressure point CAUTION—Use a tourniquet as a last resort only Remember, once tourniquent is applied, it can never be removed EXCEPT by a Medical Officer

To apply an emergency tourniquet made from something like a neckerchief, wrap the material once around the limb and tie an overhand knot. Place a short stick on the overhand knot, and tie a square knot over it. Then twist the stick rapidly to tighten the tourniquet. The stick may be tied in place by another strip of material.
Here are points to remember about using a tourniquet:
1. DO NOT use tourniquet unless bleeding cannot be stopped or controlled by any other means.
2. DO NOT use a tourniquet for bleeding from head, face, neck or body. Use only on the limbs.
3. Always apply a tourniquet above and as close as possible to the wound.
4. A tourniquet must only be drawn tight enough to stop bleeding.
5. Contrary to what you may have been taught before, do not loosen a tourniquet after application, except in extreme emergency.
6. NEVER cover a tourniquet with a dressing. If an injured person must be covered make sure tourniquet is known to all persons concerned. MARK LARGE T on subject's forehead or attach medical tag to his wrist.

HEAT STROKE & HEAT EXHAUSTION

Heat stroke and heat exhaustion are both caused by the same external conditions, but each represents a different bodily reaction to excessive heat, and there are important differences in symptoms and treatment. Usually, heat stroke involves exposure to direct rays of the sun, while heat exhaustion is more frequently found in hot, humid places, such as firerooms aboard ship.

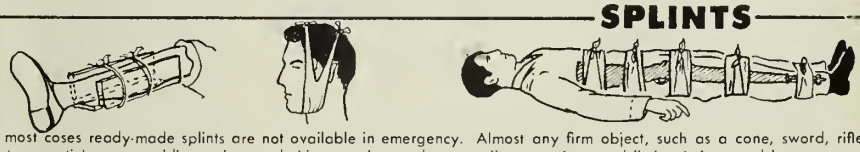
Heat stroke results from a failure of the regulating mechanism of the body. Its symptoms are headache, dizziness, frequent desire to urinate, irritability and disturbed vision. The patient suddenly falls unconscious; his skin is hot and dry; pupils are contracted; pulse is full, strong and bounding; body temperature is from 105° to 109°; and there may be convulsions.
1. Remove subject to coolest possible place; remove or loosen clothing.
2. Sponge or spray body with cold water, then fan patient so water will evaporate quickly.
3. When subject is conscious give cool (but not cold) water to drink.



HEAT EXHAUSTION (HEAT CRAMPS)

In heat exhaustion there is a serious disturbance of the blood flow. Subject loses, through prolonged sweating, large quantities of salt water. Signs are headache, dizziness, nausea, weakness, profuse sweating and loss of consciousness. It is sometimes accompanied by cramps in the muscles. These heat cramps may appear separately without any sign of heat exhaustion.
Remove subject to cool place out of drafts, so he does not chill. Loosen clothing, but keep patient warm.
Cramps may be relieved by applying heat or firm hand pressure to the affected muscles. If the subject is conscious, give plenty of warm water, adding ¼ to ½ teaspoon of salt to each glass. Note: This is probably the most important part of the treatment.
Give subject hot coffee or tea, for this stimulates the heart, decreasing the circulatory disturbance.

SPLINTS



In most cases ready-made splints are not available in emergency. Almost any firm object, such as a cane, sword, rifle, tent peg, stick, oar, paddle, or heavy clothing can be used as a splint on a fractured limb. A fractured leg may temporarily be secured to the other uninjured leg. Splints should never be applied so as to stop circulation. You should check a splinted injury every half hour for, remember, any injury is likely to swell and make the splint so tight it impairs circulation.

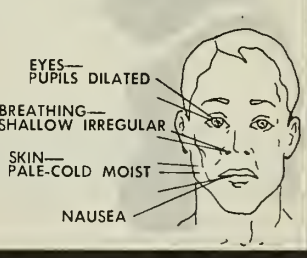
SHOCK

CAUTION—Treat a person for shock ONLY when medical attention is NOT available. Shock is a condition in which circulation of the blood is seriously disturbed

The measures used to combat shock are aimed at helping the body recover from the disturbance of the blood flow. The more extensive the injury, the more profound the shock will be. A person in shock should get PROPER medical attention as quickly as possible.



There is first pallor, then ashen color to the face and extremities.
Complaints of weakness, faintness, dizziness, and nausea are common.
Acute anxiety, restlessness and apprehension are present.
Thirst is present and sometimes intolerable. This symptom is a valuable indicator of imminent shock.
The eyes have a glassy stare, pulse is rapid and weak. The blood pressure falls.
Breathing is faint, shallow and rapid.
Appearances may be deceiving, in that the calmest, most rational subject may be the one who rapidly develops shock and becomes stuporous if his injuries are ignored.



The first aid treatment of shock is primarily prevention. The subject should be placed horizontally, with head lower than feet. The person should be kept comfortably warm with blankets. A warm stimulating drink, such as coffee or tea, could be very helpful if the person is conscious.



(*Continued*) little lower down and tied loosely and a compress or pad placed under all three knots.

The three bandages should be tightened one at a time beginning with the top when the victim has exhaled.

When a man with fractured ribs is reasonably comfortable, it isn't necessary to apply any bandage or splint.

Nose and Jaw—First aid for a broken nose consists mostly of giving the victim good advice. You should, of course, stop the victim's nosebleed by making him sit quietly with his head tipped slightly backward. He can breathe through his mouth.

Tell him not to blow his nose and, if the bleeding doesn't stop within a few minutes, a cold compress or icebag on the nose will help.

If the fracture isn't treated promptly by a medical officer, it may result in a permanent nose deformity.

A factured jaw may interfere with the victim's breathing. As you might imagine, chewing, talking and swallowing will also be difficult because any movement of the jaw will cause pain.

If the fracture impairs the victim's breathing, the lower jaw and tongue are pulled well forward and kept in that position until a four-tailed bandage can be applied around the lower jaw so it pulls the lower jaw *forward*. Tie the four tails together over the top of the head. The bandage must be sufficiently firm to immobilize the jaw, but it musn't press against the throat.

Head injuries—A skull fracture, of course, is an extremely serious injury and one in which the victim must be kept entirely quiet.

Serious brain damage can result from apparently slight injuries.

There are several pointers which indicate the possibility of brain damage such as scalp wounds, or bruises, unconsciousness and severe headache.

Pupils which are of uneven size or which don't react normally to the light are indications of possible brain damage, as are bleeding from the ears, nose or mouth, restlessness, apparent disorientation, paralysis, flushed or pale face and shock.

When any of these symptoms are present, the victim should be kept lying down. If his face is flushed, his head and shoulders should be slightly raised. If his face is pale, head and shoulders should be lowered.

Keep the victim warm and as comfortable as possible. Don't give him anything to drink. Be careful when moving the victim and see that he gets medical attention as soon as possible.

There is one big *don't* where a head injury is concerned—*DON'T* give morphine.

Back Injury—A fracture of the spine is also an extremely serious injury for its vertebrae compose the spinal column or backbone which encloses the nerve fibers in direct communication with the brain. *If the spinal cord is cut or otherwise damaged, death or paralysis will result.*

It is important that the victim's neck or back not be twisted or bent because this could result in irreparable damage to the spinal cord.

A man who has had his spine fractured will experience pain, particularly at the point of fracture. He will also be in shock, which will probably be severe, and he will be paralyzed if the spinal cord has been damaged.

If the victim can't move his arms and fingers, the damage to the spinal cord is probably in the neck. If his legs or feet and toes can't be moved, the fracture is in the back.

What is the best first aid treatment for a person with an injured back?

- Get competent medical aid as quickly as possible.
- Don't move the patient, unless failure to move him will result in further injury or death.

If the victim MUST be moved or transported before competent medical personnel arrive, a firm support should be used. In this instance, a rigid stretcher, a door, shutter or even a wide board should be used—not a canvas type stretcher which is likely to sag in the middle.

A victim with a fractured spine can be lifted, if it is absolutely essential, but don't do it without assistance, if you have any choice. Get from four to six other men so the victim's body will not be twisted or bent while being moved.

Other Injuries—A fracture of the pelvis can easily damage the organs or the large blood vessels of the pelvic region.

The victim may feel as though he is coming apart. He can't stand or sit or use the lower part of his body. He will, of course, experience great pain and shock.

If the victim must be transported without medical supervision, use a rigid stretcher and keep him lying on his back. His legs can be either straight or drawn up, whichever makes him the most comfortable.

To immobilize the victim's pelvis, bandage his legs together at the ankles and the knees and place a pillow beside each hip, fastening the pillows in place with bandages or strips of cloth. Fasten the victim securely to the stretcher or whatever support has been improvised.

THE PURPOSE of the foregoing has not been to give you a lesson in first aid, but rather to point up the importance and value of keeping up with the shipboard or shore-based training available in the field of first aid.

The variations of injuries are almost endless and volumes could be and have been written on first aid.

Now that you have checked some of the basic pointers on first aid, you can bring yourself up to date on the latest information with training aids available in the form of documentary films.

In addition, the Standard Navy First Aid Training Course (NavPers 10081-a) should be available as a refresher.

The man who knows what to do and, equally important, what not to do, in an emergency can be a real lifesaver.

—Robert Neil



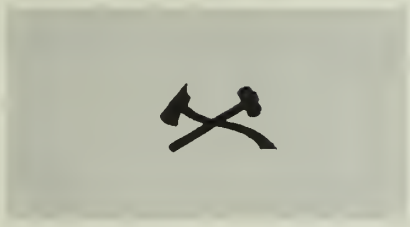
How to Keep a Tight Ship

A SAILOR'S LOYALTY to his ship goes pretty deep. Ever since the first seafaring men began to sail the seas, the ships they sailed in have developed a personality and an identity all their own.

His ship is a real part of a sailor's life, and it's not hard to figure out why. He plays an important role in its achievements and its reputation. Further, if his ship's in danger, he's in danger. This reason alone is enough to give the seagoing man a lively interest in how his ship is built and how trouble is going to be squelched, when and if it comes.

As every Navyman knows, there are Damage Controlmen on board his ship whose job it is to prevent simple damage from becoming disaster. Damage Controlmen, believing in the maxim that an ounce of prevention is worth a pound of cure, spend much of their time making sure that watertight and airtight fittings such as hatches and doors are really water- and air-tight.

The construction of Navy ships assists them in this respect for they are compartmentalized so the compartments can be isolated to stop the spread of fumes or the rush of water.



This type of construction hasn't always been standard in the world's navies, as any avid reader of World War II battle stories will recall.

In the spring of 1941, HMS *Hood* engaged in a slugging match with the German *Bismarck*. Within a matter of minutes after the battle began, flames shot a thousand feet into the air between *Hood's* masts, then degenerated into a shroud of smoke.

When the smoke lifted, the place where *Hood* had been only a few minutes before was nothing but gray, tossing water.

Three days later, *Bismarck* was sunk after taking the combined assault of British battleships, battle cruisers, cruisers, destroyers and torpedo planes.

THE COMPARISON between the quick demise of Hood and the durability of *Bismarck* against the persistent onslaught of the British provided what may be one of the most dramatic cases for watertight integrity in the history of naval warfare.

Although *Hood* admittedly was the victim of a lucky shot, she undoubtedly would have been more secure if damage control were able to contain the flooding caused by the German firepower.

Of course, keeping an eye on watertight and airtight integrity in the ship isn't the only preventive measure taken by Damage Controlmen. They must also keep an eye on the ship's draft and correct it when necessary to maintain stability.

They take soundings to see if dry spaces are really dry or that spaces containing liquid don't contain too much or too little. Sometimes, after the ship has been damaged, they must flood spaces to correct the ship's trim.

These, of course, are only a few things a Damage Controlman must do in the course of his daily work. It can truly be said that he must be a jack-of-all-trades.

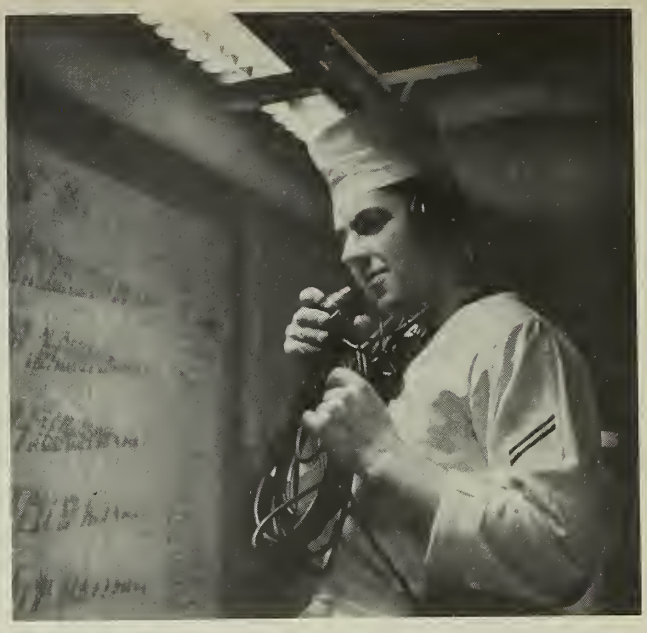
A CLUE TO THE VERSATILITY required by the DC rating can be gained by looking at a few of the

ON THE JOB—Damage control party removes shipmate from flooded compartment and (rt.) checks for radiation.









ON STATION—Ship's damage control stations keep track of 'battle damage' as telephone talkers transmit information.

advancement requirements.

In carpentry, he must know the characteristics of woods and glues the Navy uses.

He also must know how to join wood; how to make cofferdams and jumpers and be able to diagram the layout of firemains, drains and other assorted plumbing used in his ship.

He must have better than a nodding acquaintance with the Navy's boats and how to repair them.

When it comes to fighting fires, he must, of course, know what equipment he can use and how to use it, plus the chemistry of fire and the chemistry of the extinguishing agents available to him.

If his ship is the victim of violence, the damage controlman must draw upon his knowledge of the principles and methods of bracing and shoring and how to rig and use casualty power systems.

He must know how to trim the ship; and this covers a multitude of calculations.

He must know the ABCs of nuclear, biological and chemical warfare which include a knowledge of the types, characteristics and effects of nuclear blasts.

Also, in NBC warfare, an effective Damage Controlman has to be able to:

- Collect biological samples for laboratory analysis.
- Decontaminate the ship's surfaces, equipment and personnel.
- Recognize how heat from nuclear blasts is modified by weather, distance and shelter.
- Recognize the types and characteristics of biological and chemical agents and the way they are spread.

IF A DAMAGE CONTROLMAN sees an injured man lying in the path of danger, he has to know how to carry him to safety and administer artificial respiration and stop bleeding, if need be. If the man is in shock or burned, our DC man has to know what to do.

In addition to all this, he has to know the workaday mechanics of supply; be able to take care of his equipment; and be able to handle the administrative details of his job.

If you think this is a lot for one man to know and do, you're right. Because it is such a big job, a large number of the personnel on board are assigned to damage control parties.

Let's take a look at the anatomy

KEEPING READY—Emergency power is rigged aboard DE and (*rt.*) carriermen fight a 'fire' during training exercises.





of damage control on board a ship.

The nerve center of damage control is found in DC Central. In a big ship, it is manned by the damage control assistant, a stability officer, a casualty board operator and a damage analyst.

Sometimes, there are representatives of fuel oil, electrical and ordnance groups as well as telephone talkers (who are often from clerical ratings) to take and transmit information to and from various damage control stations throughout the ship.

In a small ship, Damage Control Central may simply be one of the damage control stations. Regardless of what or where it is, however, there are always alternates which can take over DC Central's function in case the previously designated center is destroyed.

IF DC CENTRAL is the brain of damage control, the nerve endings are to be found in the damage control parties. These parties are usually composed of men in the ratings normally found in the area the DC party safeguards.

For instance, a propulsion repair party might have machinist's mates, machinery repairmen, boilermen, enginemen and firemen. It might also have an electrical officer or a senior electrician's mate.

This combination of ratings fused to the know-how of the men in the damage control rating produces a team that has come out a winner time after time.

During World War II, for instance, the onslaught of the Japanese kamikazes inflicted heavy damage on many Navy ships. To some it appeared remarkable that after the worst of these attacks a ship could even remain afloat. Thanks to the efficiency of damage control, however, this proved they were tough, when they not only remained afloat but in most cases were restored to active service.

Constant training in damage control was the secret of success during World War II and it is the secret of success today. When times are quiet and there is no hint of trouble aboard ship, damage control drills keep DC organization and techniques sharpened to produce damage control parties well trained in how to do their work.

Today's Navymen also have the comforting knowledge that the history of damage control is a narrative of conspicuous success, giving it a well deserved reputation as the checkmate of disaster. —Robert Neil



MR. FIX-IT—Cutting torch is used by damage controlman to clear away 'wreckage' during drill. *Below:* When this happens the damage controlmen take over.



DAMAGE CONTROL

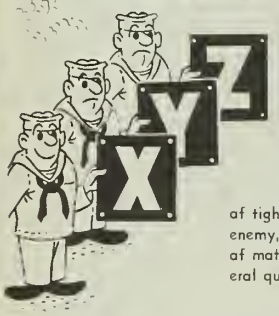
Damage cantral is cancerned nat anly with battle damage, but alsa with the maintenance af structural strength, watertight campartmentatian, stability, buayancy, and the preventian af fire and explasian, in port as well as at sea. If, in spite af all precautians and preparatians, disaster daes strike, the survival af o ship will aften depend upon prampt and carrect damage cantral measures after the damage accurs. Althaugh damage cantrol may rest primarily in the hands af specialists, detailed knawledge af ship canstruction, characteristics, stability, and the taals af the trade is available to men in related ratings. In ather wards, the safety af a ship is an all hands operatian.

CASUALTY

A B C	CLASSES A, B, C, FIRES–REPORTED
A B C	CLASSES A, B, C, FIRES—UNDER CONTROL
A B C	CLASSES A, B, C, FIRES—OUT
A	CLASS A FIRE—REFLASH WATCH SET
A	CLASS A FIRE—COMPARTMENT TESTED
A	CLASS A FIRE--FIRE OVERHAULED
F	FLOODING
F300	FLOODING AT RATE OF 300 GPM
F	FLOODING—REPORTED

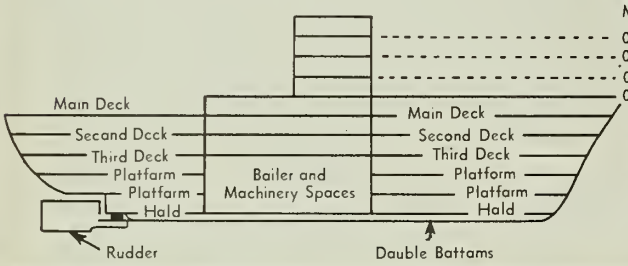
WTD

MATERIAL CONDITIONS OF READINESS



In arder ta use campartmentatian ta its fullest advantage, and ta further pravide far maximum preparedness, all the daars, hatches, scuttles, accesses, valves, and fittings af damage cantrol value are classified and marked. Navy vessels maintain different material canditians af readiness accarding ta whether cantact with the enemy is imprabable, probable, ar imminent. Each canditian represents a different degree af tightness and guarantees the maximum pratectian far the praximity af the enemy, with due regard far the health and camfart af persannel. The setting af material canditians is narmally a departmental respansibility. When general quarters is saunded, setting condition Zebra is an all hands respansibility.

DECK SYMBOLS FOR NAVY SHIPS



Ships Built Before March '49	Ships Built After March '49
0400	04
0300	03
0200	02
0100	01
100	1
200	2
300	3
400	4
500	5
600	6
900	7

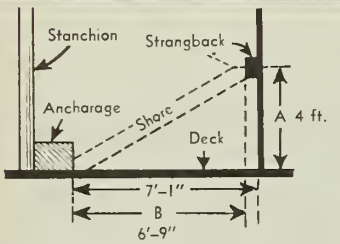
CLASSES

CLASS A

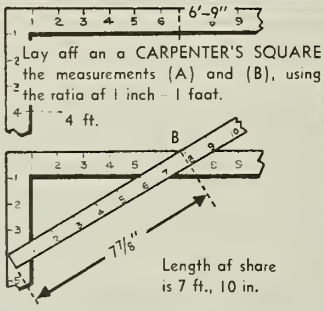
Class A fires are fires in ardinary combustible materials such as bedding, mattresses, dunnage, baaks, paper, clath, canvas, and waad. All Class A fires leave embers which are likely to rekindle if air cames in cantact with them. Therefare, extinguish fires completely.



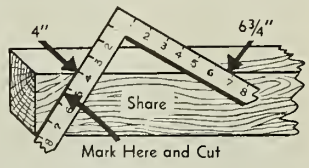
CUTTING THE



Measure the distance (A) fram the center af the strangback ta the deck. Then measure the distance (B) fram the edge af the ancharage ta the bulkhead, minus the thickness af the strangback.



Measure the diaganal distance between (A) and (B). This is the length af the share in FEET.



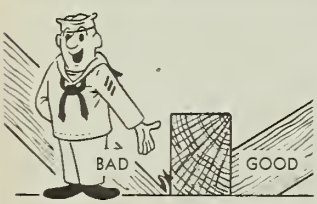
Lay the square alang the share as indicated, making sure that the measurements 4 in. and 6¾ in. tie alang the same line.



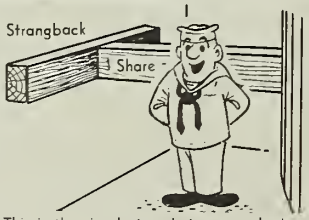
Mark Here and Cut

Measure center af cut and mark a right angle ta it for second cut. You naw have one end af the share cut.

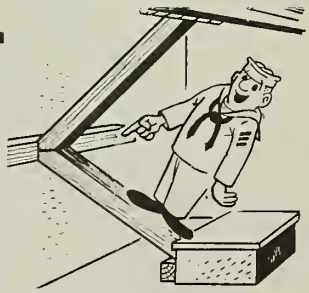
SHORING



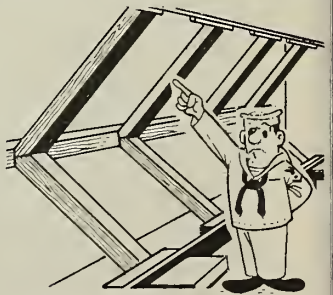
A sharp paint an share required ta take pressure will slip and curl, letting share mave ond wark laase.



This is the simplest and strangest sharing structure.
Shares perpendicular ta bulkhead exert maximum pressure.



The usual methad af installing shares is by a triangulatian system.



The basic structure is repeated as aften as necessary.

Prepared by ALL HANDS Magazine



MARKING SYMBOLS

- /F — FLOODING—BEING PUMPED OUT
- F — FLOODING—COMPLETELY PUMPED OUT
- 6" 4" — HOLES
- HOLES PATCHED
- BROKEN PIPE OR LINE
- BROKEN LINE REPAIRED
- BREAK ISOLATED
- BREAK BYPASSED
- SHORING
- F/M — FIRE MAIN
- WATERTIGHT DOOR

MATERIAL CONDITIONS OF CLOSURE

The following illustrates material conditions of closure.

Condition	Damage Is	Close Fittings Marked
X-Ray	Improbable (well protected harbar)	X
Yake	Probable (cruising conditions, unprotected harbars)	XY
Zebra	Imminent (battle conditions, maximum protection)	XYZ



Circle X and Y fittings may be opened without special permission when proceeding to battle stations or during action if it is necessary to do so to fight the ship. They must be kept closed when not in use. Red circle Z fittings may be opened during prolonged periods of General Quarters. However, these fittings are guarded for immediate closure. Circle W fittings, normally opened, are closed only to prevent ABC contamination or smoke from entering a vent system.

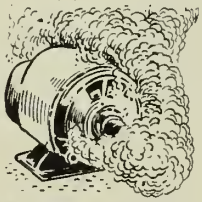
OF FIRES

CLASS B

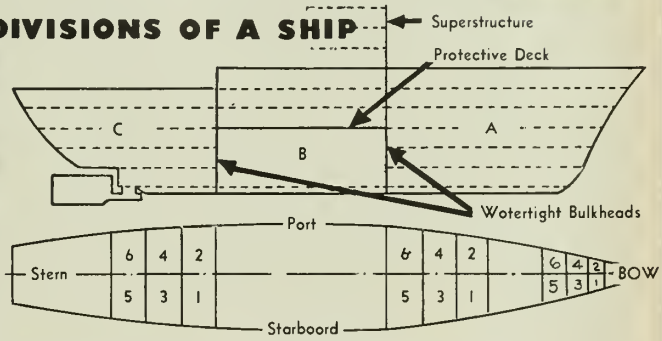
Class B fires are those that occur in flammable substances such as gasoline, jet fuels, kerosene, oils, paint, turpentine, tar, grease, and other combustible substances which do not leave embers or ashes. Chemical and foam products are best fighting agents for B type fires.

CLASS C

Class C fires are fires in live electrical materials. They present an extra hazard to the fire fighter, because of the danger of electrical shock. It is important to avoid damaging the electrical equipment. The first step is to secure the power to the circuit. Use carbon dioxide.

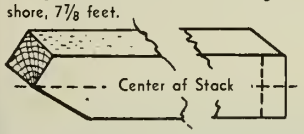


DIVISIONS OF A SHIP

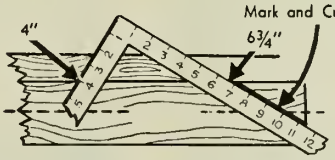


ANGLES OF A SHORE

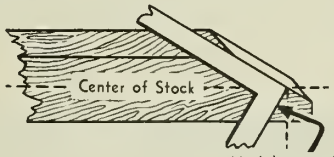
Along center of stock, measure length of shore, 7⅞ feet.



Mark off perpendicular at other end of stock



Slide carpenter's square down to center point an perpendicular, keeping the same line as before. This time, mark cutting line on other side of square.



Mark a right angle from center point of this cut for second cut.

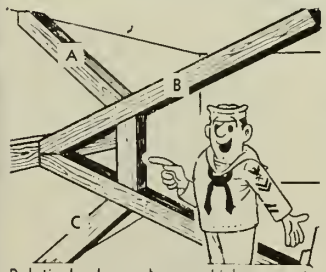


You now have a shore 7⅞ feet long with ends properly cut.

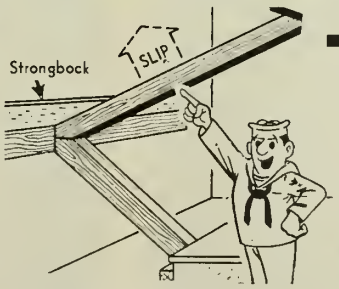
Remember

The length of a shore should never be over 30 times its minimum thickness

PRINCIPLES

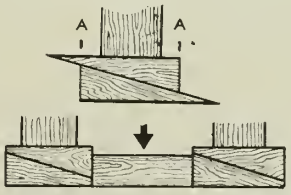


Relatively long shores which support heavy pressure may have a tendency to bow. Supporting shores A, B, C, should be installed for greater strength.



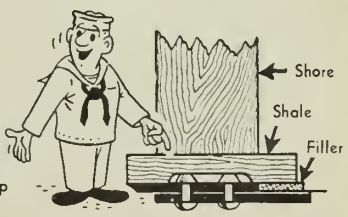
When one shore is longer than the other, a wider strongback will keep the longer one from slipping.

After wedges have been driven home, cut them off along line A–A.



Cut blocks of 2 x 4 to fit the gap and tap them in snugly.

The use of a Shole



FTC Trainees Pass a Real

FIRE HAD BEEN gnawing at the Norwegian freighter *Sandanger* for eight days as she approached San Diego's outer anchorage under tow by two salvage tugs.

When the Navy was asked to furnish fire fighters to extinguish the blaze, it was more than ready to oblige. Not only was the sea service able to lend a traditional helping hand, but here was a real challenge to the men of the Fire Fighting School at San Diego's Fleet Training Center. LT Milford C. Berg headed the team from the school which was ordered aboard *YTB 763* and *764* and sent to render assistance.

By the time they finished, they had undergone a challenging course of on-the-job training.

As the YTBs approached *Sandanger,* the freighter was listing so heavily that her port deck-edge scuppers were awash. Smoke billowed from her stack, superstructure, vents and all holds.

The starboard shell was so hot that it hissed with steam as persistent ground swells slapped it. The freighter's rudder was jammed hard aport making it difficult for the salvage tugs to hold her on a good heading.

Sandanger's tugs towed her to the general vicinity of berth 170 and the Coast Guard cutter *Alert* approached *YTB 763,* bringing the salvage master to brief LT Berg on the nature of the cargo, the condition of the anchor windlass and the increase in the list during the past 24 hours.

YTB 763 then approached *Sandanger* and sprayed her decks with water to see how hot they were. The spray on number one and four holds and the upper superstructure hissed into steam, but the area around the number two hold seemed cool enough to permit boarding.

YTB 763 made an angle approach on the port side and eight men donned life jackets and jumped aboard *Sandanger* as the YTB eased close to her bulwark.

FIRE IN *Sandanger's* machinery space had made the superstructure so hot that inspection above the O1 deck was impossible. The area was, in fact, so hot that the aluminum ladder treads had melted, leaving only the rails.

Tremendous heat radiated from the engine room casing, in the cabin area and all five holds were burning. The largest fire was in the number four hold, and the glowing red bulkhead of the machinery space gave the boarding party ample reason to suspect a large fire was at work there, too.

Sandanger's loading plan showed a large amount of coke stowed forward in the number one hold, and 175 ingots of silver were stowed in a main deck locker on the starboard side, forward over the number one hold.

The anchor windlass brake band was so damaged by fire it was impossible to estimate how long it would hold.

BY THE TIME the party returned to *Sandanger's* midship section, the list had increased to the point where the outboard main deck passage was partly awash, and she rolled enough to make her unsafe for the party to remain on board.

After a time, *Sandanger* ran aground—by the stern with her bow pointed seaward, but the persistent swells threatened to work her free. LT Berg, CWO Norman Mowery, two base fire chiefs, and two enlisted instructors boarded *Sandanger* but the vessel soon took a heavy roll completely submerging the port bulwarks. She returned slowly and LT Berg ordered all hands to return immediately to *YTB 763.*

While the party was on board, however, they noticed the forward bulkhead of number four hold was cherry red as a result of fire being fed by diesel oil from the ship's deep tanks.

Early the next morning portable pumps were rigged on an LCM and secured alongside number four hold in an attempt to cool the red-hot bulkhead. *YTB 764* was sent to the starboard side and began cooling the hull next to the machinery spaces. After wetting down the superstructure for half an hour, *YTB 763* sprayed water over several firemen who climbed to the superstruc-

SMOKE EATERS—San Diego FTC firefighters turn hoses on freighter blaze. *Rt:* Inspection party leaves burning ship.





Tough Test



MERCHANT FREIGHTER *Sandanger* lies beached off San Diego, where Navy fire fighters came to the rescue.

ture to see if hoses could be hauled to the skylight area and lowered to the fire from above.

The climbing party found the metal in the engine casing was glowing and the entire engine space burning. Two and one-half inch hoses were hauled up and lowered into the inferno.

Circulating nozzles sent a rotating shower into the area for two hours, after which the YTBs prepared to foam the engine room through the skylights.



EVEN THOUGH the area had been cooled by water from the rotating nozzles, the heat was still so intense the foam blanket burned away, and a reflash occurred in the machinery spaces with such gusto that the fire-

INSPECTION PARTY *(above)* sees extent of ship's damage. *Below:* Firefighting team runs pump as others fight fire.







NAVY FIREFIGHTING tugs from San Diego hose down *Sandanger* as she settles in water with a 30-degree list.

fighters had to beat a hasty retreat.

Again the cooling operation began. By this time, the diesel oil in the number four and five holds was an even greater danger. The firefighters began to blanket the after holds with foam.

Because the portable pumps then in use began to falter, the firefighters fought with hoses from the *YTB 763* fire main.

Two and one-half inch hoses were run from *YTB 763* and manned by the firefighters on the skylight, who directed their streams into the casing and under the stack section.

As the circulating nozzles were gradually lowered, the casing area cooled, and eventually the firemen could enter the machinery space casing from the main deck to work the corners and low areas with one and one-half inch high velocity nozzles.

Finally, 10 hours and 3000 gallons of foam liquid later, the fire in this area was out.

YTB 763 then moved to a position between the number one and two holds and began pumping water into the number one hold, where a large amount of coke was still burning fiercely. The object was to flood the hold.



MEMBERS OF firefighting school get commendations from commanding officer of San Diego Fleet Training Center for their work on Norwegian freighter fire.

WHILE THE FLOODING was in progress, lines were rigged to fight the fires in the number two and three holds, which were not burning as intensely, but proved difficult to extinguish because of quantities of cotton, pulp, bird seed and other materials that might smoulder.

At length, all the fires which had ravaged *Sandanger* were extinguished, and the silver ingots on board the ship were unloaded under the supervision of United States Marshals.

The Navy's YTBs and fire party left the hull to return to the Fire Fighting School. *Sandanger's* fires were out, indicating the firefighters had learned their lessons well.

—Robert Neil

Check That Bomb in Your Locker

Is there a bomb in your home? Or in your sleeping quarters aboard ship? There is if you have an aerosol dispenser of any type, and there are many types—dispensers for shaving cream, insect repellent, hair spray, tooth paste, deodorant, paint, varnish, polish, wax, air freshener, de-icer, ether car starter and whipped cream, to name several. These dispensers are handy, but they can be dangerous also if you don't know how to handle and dispose of them.

Gas is sealed in them under pressure. Extreme heat may build up the pressure until the can explodes like a bomb. Some injuries and deaths have been caused when people tossed supposedly empty containers in the incinerator, or placed a "bomb" in hot water. It's as simple as that.

Here's a sample. One unwary individual tossed an empty aerosol can into a fire to dispose of it. As he turned his back, there was a dull thud, and a piece of ragged metal struck him in the neck, severing the jugular vein. He was dead 15 minutes later.

Another person heated a "near empty" can in hot water to "pep it up," and get out the last of its contents. Then he shook the can. Results: one lost eye, one broken jaw.

Any aerosol dispenser should always be kept away from sources of direct heat. Don't rest it on a radiator. Don't store it near a stove or a hot pipe. When the product is finished, the recommended way to dispose of the bomb is to bleed remaining gas from the container by holding down the button (do this in a ventilated area).

If you have to be really cautious, the recommendations are to wrap the container in newspaper and store (if possible) under refrigeration. This lowers any remaining pressure. Next day, with container still wrapped, turn the bottom end away from you and puncture it. Small cans can be punctured with a beer can opener.

Then the bomb can be safely disposed of. Remember, an unpunctured aerosol container, dropped over the fantail, will remain afloat for an indefinite period, possibly leaving a telltale trail behind.

One more note: pass this information on to members of your family and your shipmates.

Award for Sea Rescue

Routine night air operations were transformed into a tense emergency situation recently when the carrier *Randolph's* number three elevator collapsed, sending a plane and five men into the sea off the Virginia coast.

Trailing CVS 15 in plane guard position was uss *Holder* (DD 819). Her crew were alerted when they saw flames suddenly engulf one side of the carrier. The DD closed in with fire hoses ready, then received signals that there were men overboard.

High seas fouled an attempt to lower a boat, so *Holder's* CO prepared to make a destroyer rescue.

MEDAL WINNER LTJG W. J. Brennan of *USS Holder* (DD 819) receives medal for saving *Randolph* seaman's life.



As searchlights were played over the area where smoke floats had been dropped by *Randolph*, some men were sighted.

Holder's crew were able to pull two men aboard. Lieutenant (jg) William J. Brennan, USN, aboard *Holder*, spotted a third man floating face down. He dove into the choppy waters, swam to the victim and towed him back to the ship. The other two men were not found.

In recognition of his heroic action, LTJG Brennan, a 1962 graduate of the Naval Academy, has been awarded the Navy and Marine Corps Medal—the highest award given for peacetime bravery.

Live Messenger Line

It was almost like a Winslow Homer painting—thundering surf, heavy ground swell and one vessel trying to shoot a messenger line to another which was being pounded to death on the beach.

For hours, the 100-foot *YTM 138* battled the heavy ground swells and the worsening surf off San Clemente, Island, Calif., but couldn't get close enough to shoot a line to the crew of the stranded *LCU 1619*.

It finally became apparent that only a swimmer could get a line from the tug to the beached landing craft.

Fred Freeland, EM2 and a scuba diver, donned his wet suit and plunged into the water carrying the messenger line with him.

The trip wasn't easy. For 30 anxious minutes the crews of both the tug and the LCU watched Freeland as the waves broke over him during the 1500-foot swim.

Freeland made it, however, and the 1000-horsepower pull of *YTM 138* pulled the landing craft off the beach.

Everybody back at the base in Long Beach considered it a job well done. Freeland, however, allowed as how it would have taken him only 15 minutes to make the swim if the heavy messenger line hadn't kept pulling him back.

GOOD SWIMMER—Fred Freeland, EM2, swam 1500 feet through rough seas to rescue beached landing craft.



FACTS FOR NAVY

WHAT IS FIRE? FRIEND OR FOE



Fire was formerly regarded as a "tenuous material substance," and classed by the ancients with air, earth, and water as one of the four elements. Centuries later man discovered that fire was caused by a chemical reaction resulting from a combination of fuel, heat and oxygen. It was found that by removing any one of the three, fire could be extinguished.

IGNITION TEMPERATURE



In order to have a combustible fuel or substance take fire, it must be hot enough to burn and it must be heated to its ignition temperature. This is the temperature at which the vapor being given off by a substance will ignite spontaneously in the air. The substance does not have to be heated to this ignition temperature throughout to ignite.

TYPES OF FIRES



Fires in ordinary combustible materials (such as bedding, clothing, wood, canvas, rope, and paper) where the cooling effect of water is of first importance to extinguish them. The chief characteristic of Class A combustibles is the embers or ashes remaining after burning. Material of this type must be cooled throughout the entire mass before the fire is completely extinguished.



Fires in flammable liquids (such as gasoline, oil, grease, paint, and turpentine). Materials of this type burn at the surface where the vapors are given off. Smothering or blanketing of the burning liquid is best for extinguishing this type of fire.



Fires in electrical equipment where the use of a "non-conducting" extinguishing agent is of first importance. In most electrical fires it will be necessary to de-energize the circuits (cut off the electricity) before any progress can be made.

HEAT IS TRANSMITTED BY

(1) CONDUCTION

Heat is transferred through a substance by direct contact. Thus a thick steel bulkhead with a fire on one side causes heat to be given off in adjoining compartments through the steel by conduction.

(2) CONVECTION

The heated air and gases rise from a fire bringing heat to all other combustible substances within reach.

(3) RADIATION

Heat is transmitted in all directions and no medium is required. It is this radiation which causes the feeling of heat when standing before an open fire.

Prepared by ALL HANDS Magazine



Pointers on

The best way to combat fires is to prevent them. Fire prevention must become a daily

MOST DESTRUCTIVE

CARELESSNESS



Fires never simply happen. They must be caused, and men, women and children are nearly always responsible.



PERSONAL HABITS CAN



By being careful in the use of flame-producing tools and equipment aboard ship or station.



Keeping containers of volatile liquids tightly closed.

By being careful in the use of open lights and electrical equipment where an explosive vapor might exist.





By using non-sparking tools where fir or explosive hazar exists.

PLAN OF ACTION

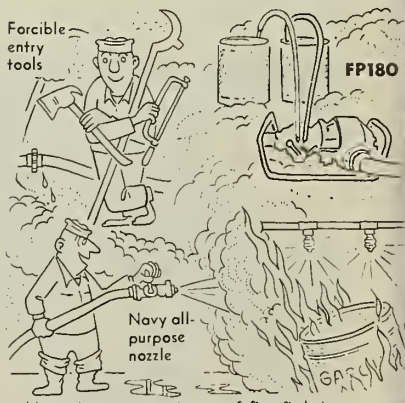


Give the alarm, notify at least one other person who can turn in the alarm.



When reporting the fire give an accurate description and location in a clear voice.

EQUIPMENT FOR



Many important pieces of fire-fighting gear are not shown. Mention should be made in passing of such apparatus as portable CO_2 extinguishers, installed systems, asbestos

FIREFIGHTERS

Fire Prevention

habit. Make a habit of keeping things squared away and shipshape at all times.

FIRES ARE CAUSED BY:

LACK OF KNOWLEDGE

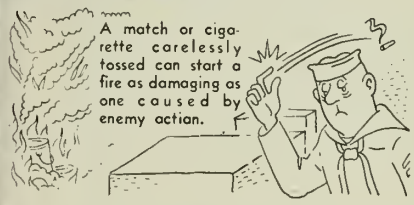
Knowledge of what fire is, how it can begin and what must be done to prevent it, is essential, but this alone is insufficient.

BEING UNPREPARED



Training is often tiresome, yet it is the most faolproof approach to the prevention of destructive fires.

MAKE OR BREAK FIRES



A match or cigarette carelessly tossed can start a fire as damaging as one caused by enemy action.



By obeying Safety Signs, Don't smoke in magazines, paint lockers, or while fuel or ammo is being taken aboard.

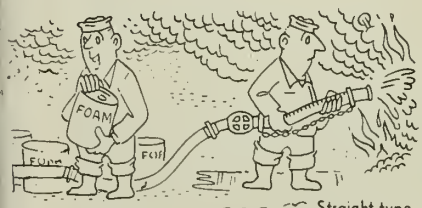
REPORTING A FIRE



Inspect from a safe distance and attempt to determine what is burning.

Do what you can to extinguish or control the fire until help arrives.

FIGHTING FIRE





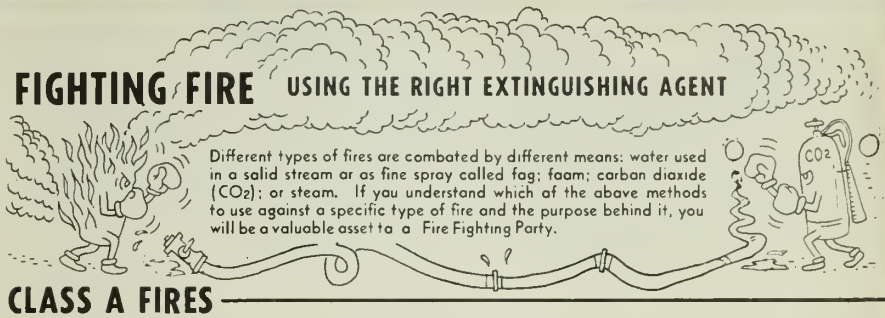
Straight type pick-up tube proportioner

Fog spray installations

Foam nozzle

suits, lifelines, the P 250 and other pumps and oxygen — breathing apparatus. Know where every piece of equipment is located. Know how to use it correctly.

FIGHTING FIRE — USING THE RIGHT EXTINGUISHING AGENT



Different types of fires are combated by different means: water used in a solid stream or as fine spray called fog; foam; carbon dioxide (CO_2); or steam. If you understand which of the above methods to use against a specific type of fire and the purpose behind it, you will be a valuable asset to a Fire Fighting Party.

CLASS A FIRES

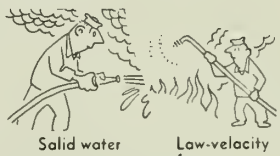


Woodwork, bedding, clothes, combustible stores

USE



Carbon dioxide (CO_2)



Solid water stream

Low-velocity fog



High-velocity fog

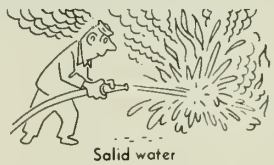


Films, celluloid, etc.

USE



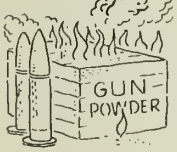
Water immersion



Solid water



High-velocity fog



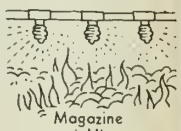
USE



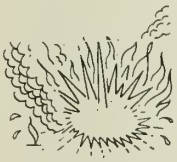
Water immersian



Solid water stream



Magazine sprinkling



Incendiary bambs

USE



(Throw overboard)



High-velocity fog

Sand

CLASS B FIRES



Gasoline, kerasene, fuel oil and diesel oil

US



CO_2, foam or fog

Low- or high-velocity fog

Fog spray CO_2 (fixed system)

Installed sprinkling system



Paints, spirits, flammable stores

USE



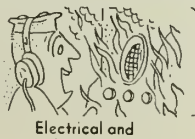
CO_2 extinguishers

Low- or high-velocity fog

Installed sprinkling system

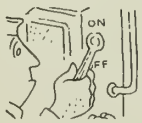
Foam

CLASS C FIRES



Electrical and radio apparatus

USE



De-energize affected circuits



CO^2

High-velocity fog

Foam application

KEEP YOUR SHIRT ON — DON'T PANIC



Any clothing which covers your skin protects you in case of fire or explosion. Bare skin is cooked instantly by a flash from an explosion. If your clothes catch fire, don't run. This fans the flame; lie down and roll up in blanket, coat, or anything at hand.







PATROL PLANE P-3 *Orion* replaced older P-2 *Neptune* in SAR. *Rt:* Destroyers are often called for help in rescues.

SEARCH AND RESCUE

IF YOU'RE UNFORTUNATE enough to crash at sea, become lost in a forest or stranded (alone) on desert island, survival training may save your life . . . but won't insure your comfort. Before long you'll begin looking forward to being found and transported back to civilization.

You probably won't have long to wait, thanks to the Search and Rescue (SAR) centers (officially named Rescue Coordination Centers) scattered around the world. They are always on the ready.

SAR centers are operated by the Navy, Coast Guard and Air Force. They are command centers for rescue operations and are charged with saving lives and property in their assigned areas. A good example may be found at rescue centers in the Hawaiian Islands, where SARmen keep tabs on sea and air traffic in a 10-million-mile area of the central Pacific.

When a Mayday or SOS is broadcast . . . a ship or plane is reported overdue, the SAR center goes into action on the double.

First, the last known position of the missing craft is determined. Ship movements are simple—they're charted on a large map at SAR headquarters. Or if it's an aircraft in trouble or overdue, the local Civil Aeronautics Adminstration Office can supply the last position report.

When the nature and location of the emergency is relatively clear, the SAR Center may call on full-time search and rescue units. The 76th Air Rescue Squadron at Hickam Air Force Base can provide helos and long-range search planes. Coast Guard men are the real experts on at-sea rescue, and are always ready with specially-configured search aircraft, cutters, buoy tenders and small craft. Nearby Naval Stations can provide helos and boats. For land searches anywhere in Hawaii, the Army's Land Rescue Team is available.

If there's sea traffic in the emergency area, the ships may be called on to lend a hand. Aircraft carriers, cruisers and destroyers going to or returning from duty in the western Pacific are diverted to take part in many SAR operations.

SAR CENTERS are usually pretty busy. Many cases concern small craft which are overdue at destination or stranded by engine trouble. Others begin when airliners enter the Hawaiian area with crippled engines. When this happens the aircraft is met by SAR planes and escorted to the nearest landing field.

Many of the emergency calls are requests for medical assistance. Last July, for instance, a Navy destroyer operating in the Hawaiian area sent an emergency call to SAR: One of the crew members had suffered a heart attack. Could SAR lend a hand?

It could. The destroyer was ordered to French Frigate Shoals and a Coast Guard seaplane with a doctor

SHIPWRECKED MERCHANT seamen are rescued by Navymen. *Rt:* Hospital corpsmen help rescued pilot out of helicopter.







SAR CENTERS coordinate rescues.

TEAM



WELCOME SIGHT to any man in water is view at 12 o'clock of rescue helicopter.

aboard was dispatched to meet her there. It was night when the seaplane arrived, and it landed with the aid of flare pots and vehicle headlights. It wasn't long before the sick man had been transferred to Tripler Hospital on the Islands.

SEARCH AND RESCUE operations on land are generally coordinated by the Air Force, while sea SAR is the responsibility of the Coast Guard. But the SAR centers are manned by personnel from the service in the area. Rescue operations in the Guantanamo area, for instance, though coordinated by the Coast Guard, are carried out by Navymen. A mid-western U. S. SAR center would be manned by Air Force personnel.

SAR centers are located at:

Boston, Mass. (Coast Guard)
New York City, N.Y. (Coast Guard)
Norfolk, Va. (Coast Guard)
Miami, Fla. (Coast Guard)
New Orleans, La. (Coast Guard)
Bermuda (Coast Guard)
Guantanama Bay, Cuba (Navy)
San Juan, Puerta Rica (Coast Guard)
Los Angeles, Calif. (Coast Guard)
San Francisca, Calif. (Coast Guard)
Seattle, Wash. (Coast Guard)
Ketchikan, Alaska (Coast Guard)
Kadiak, Alaska (Coast Guard)
Adak, Alaska (Navy)
Honolulu, Hawaii (Navy, Coast Guard, Air Force)
Elmendarf AFB, Alaska (Air Farce)
Midway Island (Navy)
Kwajalein, Marshall Islands (Navy)
Guam, Marianas Islands (Navy)
Iceland (Navy)
Azares (Air Force)
Robins AFB, Ga. (Air Force)
Richards-Gebaur AFB, Mo. (Air Farce)
Hamilton AFB, Calif. (Air Force)
Eglin AFB, Fla. (Air Force)
Ramstein AB, Germany (Air Force)
Clark AB, Philippine Islands (Air Force)
Tachikawa AB, Japan (Air Force)
Albrook AFB, Panama Canal Zane (Air Farce)

Jon Franklin, JO1, USN

CARRIER-BASED helicopter hovers over downed pilot in preparation for pickup as motor whaleboat stands by to help.



SAFETY FILMS: . . . PREVIEW THEATER

IN THE PRECEDING pages we have tried to describe procedures and practices which may very well save the life of your shipmate or, possibly, even your own life. Limitations of space, time and personnel may have, however, caused us to fail to give proper emphasis on certain areas of safety and survival.

To help rectify this situation, we are listing below the titles of those documentary films which may be found in the *U. S. Navy Film Catalog* (NavWeps 10-1-77), which we think will be most helpful. There are more, many more, in the *Catalog*.

All are unclassified.

SURVIVAL

Jungle Survival: MV-8826 (36 minutes, sound, color). Deals with different types of jungles and describes characteristics of rain and cloud forests, savannas and swamps.

Jungle Operations—Part 1—How to Live in the Jungle: MA-8944A (19 minutes, B&W, sound). How to survive in the jungle under combat conditions.

Survival in the North Temperate Regions—Living off the Land: FN-9202A (14 minutes, color, sound). How to survive under emergency conditions in the North temperate regions.

Survival Training—Snow and Glacier Travel: MV-9404B (12 minutes, B&W, sound). Familiarizes the survival student with problems of travel over glaciers and snow-covered terrain.

Survival Training—Preparing an Animal for Use: MV-9404C (13 minutes, B&W, sound). How to prepare an animal killed in the field for survival use.

Survival Training—Utilization of Game: MV-9404D (11 minutes, B&W, sound). How to use parts of an animal for survival use.

Survival Training—Map and Compass: MV-9404E (11 minutes, B&W, sound). How to use map and compass.

Survival Training—Route Planning and Selection: MV-9404F (13 minutes, B&W, sound). How to plan long- and short-range routes of travel.

Survival Training—Preparing Plant Food for Use: MV-9404G (14 minutes, B&W, sound). Primitive methods of preparing plant foods and information on how to obtain maximum nutrition from limited food.

Survival Training—Fishline Sextant: MV-9404H (12 minutes, B&W, sound). How to set up and use the fishline sextant.

Survival Training—Fire Building: MV-9404I (9 minutes, B&W, sound). Different types of improvised fire building equipment are demonstrated.

Survival Training—Tactical Movement: MV-9404J (11 minutes, B&W, sound). Basic information on how to survive in enemy territory.

Survival Training—Camouflage for Evasion: MV-9404K (12 minutes, B&W, sound). Blending with the terrain.

Survival Training—River Crossings: MV-9404L (13 minutes, B&W, sound). Effective techniques of crossing rivers and streams under different conditions.

Survival Training—Medical Aid: MV-9404M (16 minutes, B&W, sound). Deals with emergency medical measures for common injuries.

Survival Training—Back Packing: MV-9404N (10 minutes, B&W, sound). How to construct packs and carry burdens.

Survival Training—Hunting in Survival: MV-9404O (6 minutes, B&W, sound). Location of game and correct methods of hunting.

Survival Training—Traps and Snares: MV-9404P (13 minutes, B&W, sound). Proper location of traps, use of some is demonstrated.

Survival Training—Fishing: MV-9404Q (12 minutes, B&W, sound). Catching fish with limited or improvised equipment.

Survival Training—Fires for Survival: MV-9404R (7 minutes, B&W, sound). Nature, usefulness and types of fires for survival.

Survival Training—Improvised Signaling Methods: MV-9404S (7 minutes, B&W, sound).

Survival Training—Parachuting: MV-9404T (10 minutes, B&W, sound). Title is self-explanatory.

Survival Training—Survival Firearms in Hunting: MV-9404U (10 minutes, B&W, sound). Use and maintenance of M-4 and M-6 survival weapons.

Survival Training—River Travel: MV-9404V (9 minutes, B&W, sound). Construction and use of rafts plus techniques for river travel.

Survival Training—Shelter: MV-9404W (10 minutes, B&W, sound). How to select and erect shelters for any environment.

Survival Training—Forest Fire Suppression: MV-9404X (10 minutes, B&W, sound). How to control wild fires with primitive equipment.

Deep Sea Survival: MV-9407 (27 minutes, color, sound). Case histories which portray violent conditions at sea, but prove survival is possible with will, endurance and training.

Edible Plants of Field and Forest: MC-9781 (20 minutes, color, sound). Describes edible plants in North temperate regions and how to prepare them.

Survival Stresses: MV-9794A (30 minutes, color, sound). Physiological and psychological stresses which may be encountered by men facing a survival problem in any area.

Tropic Seacoast Survival: MV-97948 (23 minutes, color, sound). Procedures and techniques for survival along tropical seacoasts.

Man Overboard Emergency Drill: SN-370 (20 frames, B&W, sound). Demonstrates procedures including launching and securing boat.

Abandon Ship: MN-1145 (32 minutes, B&W, sound). Leaving the ship, swimming through burning oil and gasoline and emergency flotation techniques.

Survival in the Aleutians: MV-7818 (70 minutes, color, sound). Shows actual conditions and methods of survival.

Evasion: MV-7840 (90 minutes, B&W, sound). Aircraft crew is forced to bail out over enemy territory.

Making Sea Water Drinkable with the Solar Still and Desalting Kit: MN-7918 (14 minutes, B&W, sound).

Survival at Sea: KN-7933E (30 minutes, B&W, sound). Covers the Naval Reserve Recruit Training survival curriculum.

Tenderfeet V—An Exercise in Escape and Evasion: MN-8280 (18 minutes, B&W, sound). Documentary on Air Force escape and evasion exercise.

Survival on Polar Sea Ice: MV-8381 (35 minutes, B&W, sound). Building shelters, obtaining drinking water, signaling, hunting for food.

Survival on the Ice Cap: MV-8384 (40 minutes, B&W, sound). Film centers on a C-47 crew which crashes on the icecap.

Sun, Sand and Survival: MV-8677 (22 minutes, color, sound). Desert survival, including use of survival equipment, setting up a plan, sending messages, and making shade.

U. S. Navy Armored Life Jacket: MN-9026 (7 minutes, B&W, sound). Lightweight glass fabric life jacket will stop .38 .45 and sub-machinegun bullets. Film deals with its use.

Life Jacket Flotation Characteristics: MN-9140 (109 minutes. B&W, silent). Various types of life jackets are demonstrated.

Swimming for Survival: MN-9198 (17 minutes, B&W, sound). Human stroke, side stroke, breast stroke, trudgeon, sculling, treading water, and methods of entering the water.

Survival in North Temperate Regions—Traveling and Camping: FN-92028 (13 minutets, color, sound). Elementary traveling techniques in the North temperate area.

Life Preservers—Shipboard Inflatable Type: MN-9355A (5 minutes, B&W, sound). Procedures for testing and emergency inflation.

Life Preservers—Jacket Type: MN-93558 (8 minutes, B&W, sound). Use of inherently buoyant life preservers.

Life Preservers—Yoke Type: MN-9355C (3 minutes, B&W, sound). Use of yoke type preservers issued to troops engaged in amphibious operations.

FIRST AID

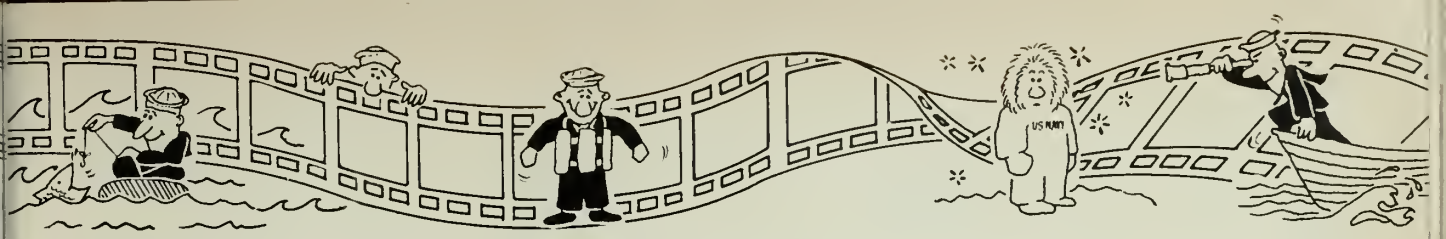
First Aid for the Injured—Introduction: MN-8180 (17 minutes, color, sound). Basic first aid procedures.

First Aid for Asphyxia: MN-8181 (22 minutes, color, sound). Recognition and treatment of asphyxia.

First Aid for Bleeding: MN-8182 (20 minutes, color, sound). Recognition and treatment of the three types of bleeding.

First Aid for Burns: MN-8185 (21 minutes,





color, sound). Detoiled infarmotion on procedures and techniques used to recognize ond treat burns. Intended primorily for haspital corpsmen trainees.

First Aid for All Hands—Intraduction: MN-B1BBA (12 minutes, B&W, sound). Orderly procedure for first aid examinatian ond treatment of the injured by non-medical personnel.

First Aid for All Honds—Asphyxia: MN-B1BBB (14 minutes, B&W, sound). Recognition of asphyxio ond three steps of treotment for all honds.

First Aid for All Hands—Bleeding: MN-B1BBC (14 minutes, B&W, saund). Types of bleeding ond the use of pressure dressings and torniquets.

First Aid for All Honds—Fractures: MN-B1BBD (24 minutes, B&W, sound). Recognition of different types of fractures ond the generol treatments required.

First Aid for All Honds—Burns: MN-B1BBE (11 minutes, B&W, saund). Describes types of burns, their seriousness, and the three-step treotment.

First Aid for All Honds—Hondling ond Transporting the Injured: MN-81BBF (12 minutes, B&W, sound). Presents seven principles for hondling ond tronsporting injured.

Medicol Defense Againsf Chemicol Worfore—Gas Attock—Self-Aid: MN-B266D (17 minutes, color, sound). Detailed explonotion of self-oid if subjected ta a chemicol worfare ottock.

Quiz Film on Bleeding: MN-B976 (14 minutes, color, silent). Silent quiz film camposed of selected scenes from *First Aid for Bleeding* (MN-B1B2) with questions ond multiple choice answers.

Quiz Film on Fractures: MN-B977 (15 minutes, color, silent). Silent quiz film testing the student's mastery of items presented in MN-B1B4A ond B.

Quiz Film an Burns: MN-B97B (15 minutes, color, silent). Compased of selected scenes fram *First Aid for Burns* (MN-B185).

First Aid—Part 4—Resuscitotion, Mouth-to-Mauth, Mouth-to-Nose: MA-9559 (23 minutes, color, sound). Details of mouth-to-mouth resuscitotion ond olternote methods.

First Aid for Frocfures—Introduction: MN-81B4A (14 minutes, colar, sound). Generol treotment of frocfures with emphosis on fractures of the extremities.

First Aid for Frocfures—Skull, Spine ond Pelvis: MN-8184B (10 minutes, color, sound). Fundamentols of recognizing ond handling frocfures of skull, spine and pelvis.

First Aid for Frocfures—The Triongulor Arm Splint: MN-B1B4C (6 minutes, B&W, sound). Application and modificotions of the triangulor arm splint.

First Aid for Frocfures—The Universol Leg Splint: MN-B184D (4 minutes, B&W, sound). Step-by-step demonstration of how ta apply o universol leg splint to frocfures.

First Aid for Frocfures—The Thamos Leg Splint: MN-81B4E (8 minutes, B&W, sound). How to apply o Thomos leg splint ta fractures af the thigh, knee or leg.

First Aid Handling ond Tronsparting the Injured — Introduction: MN-81B7A (13 minutes, B&W, sound). Seven principles of handling and transporting casualties.

First Aid Hondling and Transporting of the Injured—Mostering Basic Techniques: MN-B1B7B (26 minutes, B&W, sound). Praper techniques of straightening a seriously injured casualty, rolling, lifting and transporting.

First Aid Hondling and Tronsporting of the Injured — Lifelines, Improvised Stretchers ond Corriers: MN-81B7C (12 minutes, B&W, sound). Speciol techniques of handling and tronsporting the injured in emergency situotions where standord stretchers are not availoble.

Snoke Bite Kit, Suction, In Plostic Corrying Cose: SA-8200 (11 minutes, 39 fromes, B&W sound). Recognition ond treotment of paisonous snake bite.

First Aid—Port 2—Everyday Emergencies: MA-B504B (29 minutes, B&W, sound). Cavers such subjects os poisoning, poison ivy, chemicals in the eye, insect in eor, and electrical shack.

SAFETY

115 Volts—Deodly Shipmote: MN-B990 (19 minutes, colar, sound). Dongers of low voltoge electrical shock.

Safety On the Job At Seo: MN-B639 (16 minutes, B&W, sound). Shipboord safety.

Deoth on the Highwoy: MC-9463 (18 minutes, color, sound). Actuol auto occidents ond the importonce of defensive driving.

Nightmore for the Bold: MV-9643 (53 minutes, B&W, sound). The story of a mon who must leorn to live with o lifetime of regret os the result of on auto occident.

Perception of Driving Hazords—Part 2—Limited Access Highwoys: SA-9510B (43 fromes, color, silent). Frequent couses of occidents of limited access highways.

Intraduction to Disaster Plonning: MA-9786 (18 minutes, B&W, sound). Developing o disaster plan by the government or industry.

Motor Monio: MC-9811 (8 minutes, sound, color). Animoted film storring Goofy in the dual role of pedestrion ond driver.

None for the Road: MC-9B25 (11 minutes, color, sound). The drinking driver problem.

VADM Smedberg Speaks of Operotion Drivesofe: MN-9B34 (5 minutes, calar, sound). The title is self-explonatory.

Grime Doesn't Poy: SC-1250 (18 minutes, B&W, 96 fromes, sound). Good hausekeeping as a safety foctor.

The Eyes Have It: SC-1251 (17 minutes, 122 fromes, B&W, sound). Avoiding freak accidents which may cause blindness.

Handle With Care: SC-1252 (14 minutes, 93 frames, B&W, sound). Lifting heavy objects.

Sofety in Air Stations: MN-1921B (14 minutes, B&W, sound). Preventing occidents at oir stotions by a sensible opplication af safety rules.

Sofety in Offices: MN-1921D (10 minutes, B&W, sound). Illustrations.

To Live in Dorkness: MN-1921F (14 minutes, B&W, sound). Three cases where loss of sight cauld have been ovoided.

Safety for Welders (Use of Welding Pratective Equipment): MN-1921G (7 minutes, B&W, sound). Demanstrates use of protective clothing ond other equipment for the prevention of eye injuries, skin burns and metol fume poisoning.

Death Wolks the Highwoy: SN-332B (30 minutes, 112 frames, B&W, sound). Statistics ond couses af pedestrian accidents based on a study in San Diego.

A Sofe Day—Sofety: MC-4256 (10 minutes, B&W, sound). Typicol sofe worker in his doily routine.

Sofe All Around: SC-4292 (18 minutes, B&W, saund). On-the-job sofety.

Inertio—Sofe Driving: SC-4297 (15 minutes, B&W, sound). Law of inertia as applied to driving.

For Sofety's Soke: MC-4597 (13 minutes, B&W, sound). Sofety precoutions when hondling portable power tools.

Safely We Work: SC-5227 (15 minutes, B&W, sound). Sofety in railroad yords.

Trogic Rood to Sofety: SC-6735 (27 minutes, B&W, sound). For drivers of cammercial vehicles, especially of tractor troilers.

Driven to Kill: MC-6746 (20 minutes, B&W, sound). Moin chorocter is involved in o driving occident in which onother mon is killed. Emphosizes the importonce of courteous and safe driving.

Sofety Precoutions for Electronics Personnel—Intraduction: MN-6754 (15 minutes, B&W, sound). Electricol ond mechonicol hazards encountered by Electranics Technicions.

Accident Prevention Aboord Ship: MN-6939 (9 minutes, color, saund). Illustrates o number af typicol shipboard occidents.

It's Wonton Murder: MC-6983 (10 minutes, B&W, sound). A GI survives three yeors of cambot to be killed in on outomobile occident.

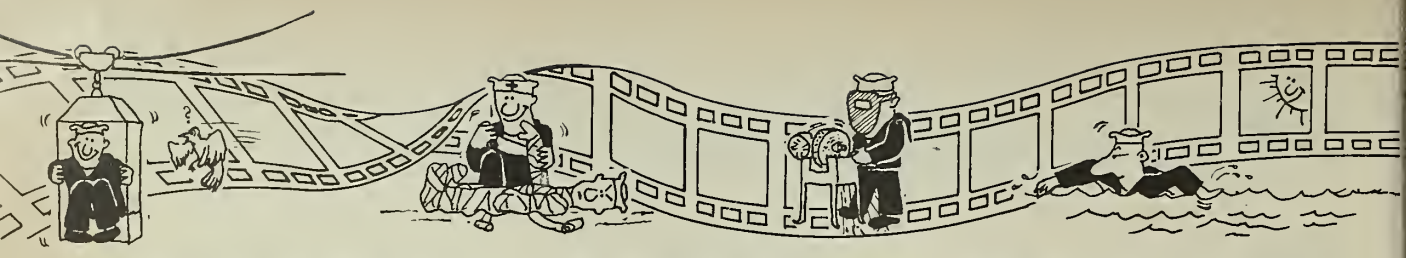
A Closed Book: MC-7430 (26 minutes, B&W, sound). Small-town doctor launches o ane-man safety drive ofter his wife is killed in an outo accident.

Eyes of Flight: MC-7471 (31 minutes, color, sound). How ta cleon, polish, buff ond saw ocrylic plastics used in oircroft canopies.

Shipbuilding Sofety—Rigging—Moking a Sofe Lift: MN-7486B (18 minutes, B&W, sound). Describes three procedures used in making o sofe lift.

Shipbuilding Safety — Rigging — Maintenonce ond Care of Rigging Geor: MN-7486C (17 minutes, B&W, sound). Handling gear correctly, overhauling thoroughly ond testing regularly.





Industriol Hygiene and Sofety—Breothe ond Live: MN-749BA (18 minutes, calar, sound). Health precautians and protective gear designed ta protect from noxious goses.

Industrial Hygiene and Safety—Drive Right: MN-749BB (21 minutes, B&W, saund). Preoccupation, intoxicatian, fatigue and speed os mojor causes of traffic accidents. Illustrated by cose histories.

Driving in the City: MC-7B41B (17 minutes B&W, saund). Prablems of city driving ore illustrated by street scenes and running narrotion.

Driving on the Highway: MC-7B41C (22 minutes, B&W, sound). Prablems of highwoy driving ore illustrated by rood scenes and running narrotion.

Care af the Cor: MC-7B41E (13 minutes, B&W, saund). Value af proper care and maintenance for vehicle is shawn through street scenes and running norrotion.

Driving Under Adverse Conditions: MC-7B41F (13 minutes, B&W, sound).Driving in rain, fog and snaw.

Safety Saves: MC-8145 (25 minutes, B&W, sound). Driving a truck safely.

The Gamblers: MC-8146 (20 minutes, colar, sound). Safe operation of earth-moving equipment.

Deoth on the Highway: SC-8425 (30 minutes, 32 frames, B&W, saund). Shows what cauld happen to the coreless driver.

The Troffic Accident Spot Map: MA-8542A (4 minutes, B&W, sound). Use ond preporotion of the troffic accident spot mop.

The Collision Diogram: MA-8542B (5 minutes, B&W, sound). How to prepore o collisian diagrom from the accident report.

Motar Vehicle Spot Speed Studies—Setting Up Mirror Boxes: MA-8543 (6 minutes, B&W, sound). How to set up mirror boxes for use in traffic spot speed studies.

What's Your Safety I. Q.?: MC-9252 (B&W, sound). Off-the-job safety hozards must be identified by the audience before the answers are floshed on the screen.

Safety in Aircraft Line Operations: MN-9301 (16 minutes, B&W, sound). Hazards of everydoy oircraft line operotions.

High Altitude High Speed Flight—The Vg Diagram: MN-6915D (16 minutes, B&W, sound). Pilot indoctrination.

Full Pressure Suit—Mark 4: MN-8323A (19 minutes, B&W, sound). How to put an, odjust ond take off the full pressure suit.

Aviatian Survival and Safety Equipment—Liquid Oxygen Canverters: MN-8364A (12 minutes, B&W, sound). All abaut canverters.

Aircraft Accident Prevention—Ground Accidents: MN-8366A (14 minutes, B&W, sound). Prevention of aircroft ground accidents.

Maintenance Safety in Aviatian—Murphy's Law: FN-8642 (10 minutes, color, sound). Cammon errars in instollation of equipment.

No Margin far Error: MC-8724 (22 minutes, colar, sound). Illustrates methods used to train flight safety afficers.

Aircraft Accident Investigation: MV-874B (37 minutes, B&W, sound). Techniques used to determine the cause of oircroft accidents.

Helicopter Rescue at Sea: MN-8760A (21 minutes, color, sound). How the patential survivar can cooperote in his own rescue by helo.

Safety is no Accident—Ground Safety on and Around Naval Aircraft: FN-8805 (16 minutes, B&W, saund). Preventive meosures which reduce accidents in and around aircraft.

Danger—Stacked Deck: FN-8909 (20 minutes, color, sound). Six rules for flight deck safety.

Ditching Techniques for Transport Aircraft: MV-8930 (16 minutes, calor, sound). What flight crews ond possengers should do in cose af crosh at sea.

Parachute Landing Techniques: MN-9299B (14 minutes, B&W, sound). Parachute landings ot sea or on land with various types of harness.

Huff and Puff: MB-9517 (7 minutes, color, sound). Effects of hyperventilation.

Mk 5 Anti-Exposure Suit: MN-9549 (18 minutes, B&W, sound). Use of the onti-expasure suit and ottached equipment.

Ditching Techniques for Transport Aircraft—Communications, Sea Evaluation, Headings and Landings: MV-9563 (26 minutes, color, sound). Steps to minimize hazards of ditching when o forced londing ot seo is anticipoted.

Helicopter Rescue Operotions: MV-9565 (34 minutes, color, sound). Hela pilots, copilots and poramedics work together for successful air-sea rescue aperations.

Search Operations: MV-9793 (29 minutes, B&W, saund). Dramatizes a typical missing oircroft incident to demonstrote systematic seorch ond rescue operations.

Air-Sea Rescue: MG-4327 (18 minutes, B&W, saund). Problems af air-sea rescue and how they ore solved by Air-Seo Rescue Service.

Flight Safety—Unfomiliority with Aircraft: MN-4353O (6 minutes, calor, sound). Shows importance of checkout before a pilots flies on unfamiliar aircroft.

Flight Safety—Hozords in Ground Operation af Jet Aircraft: MN-4353P (5 minutes, color, saund). Exhaust blast, suction and cooling hazards.

Flight Safety—Avoidable Carrier Accidents: MN-4353Q (8 minutes, color, saund). Causes af carrier accidents.

Flight Safety—Bailing Out: MN-4353R (9 minutes, calor, sound). How to bail out safely.

Flight Safety—Collisions During Simulated Combat: MN-4353S (6 minutes, color, sound). Four basic causes of accidents while engaged in simulated cambot.

Flight Safety—Reach for the Right Control: MN-4353T (8 minutes, calor, sound). Grandpaw Pettibone admonishes pilots an the necessity for checking and dauble-checking their flying habits ta prevent wheel and flaps accidents.

Search and Rescue—Visual Aspects of Search and Signaling: MN-5309A (19 minutes, color, sound). Signal mirrors, smoke, flores, pistols, ond dye morkers.

Physiology of High Altitude Flying: MN-5311 (15 minutes, color, sound). Dongers of high altitude flying.

Use of Parachutes: MN-5B01 (15 minutes, B&W, sound). Vorious types af chutes and how ta use them.

Expendable Radio Sono-buoy in Air-Seo Rescue—Description: MN-6483A (15 minutes, B&W, sound). Whot the buoy is and how it works.

High Altitude, High Speed Flight Problems—Physiological Effects: MN-6915A (23 minutes, calor, sound). Effects of high oltitude ond high speed flight on pilat.

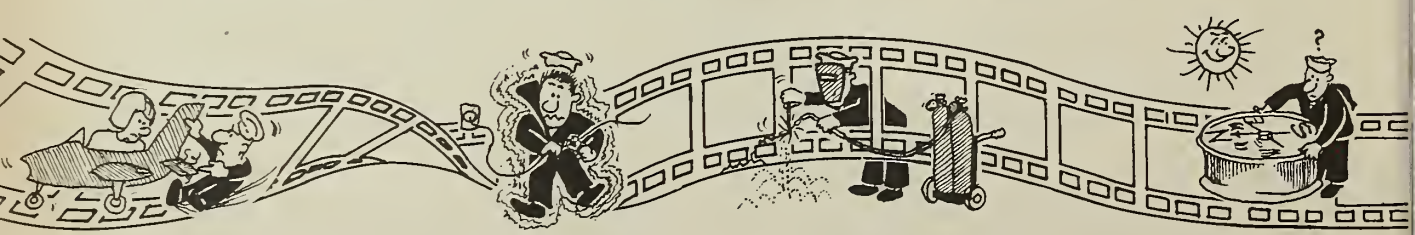
Mark 7 Mod. 1 Barrier and Barricade Equipment: MN-7852C (20 minutes, B&W, sound). Operotion and preventive maintenance.

Safety in Ferrying Aircraft: MN-8105 (19 minutes, B&W, sound). Procedures ond safety precautions.

Aircroft Accident Investigotian: MN-8270 (30 minutes, B&W, sound). Duties of squodron personnel and flight surgeons when there is an occident in their squodron.

Escape by Parochute: MN-9299 (20 minutes, B&W, sound). Describes vorious types of porochutes used by the Novy.

Emergency Escape Using Ejection Seats: MN-9313 (14 minutes, B&W, sound). Installotion and operotion of seot.



BOOKS

HERE ARE HOW-TO-DO-ITS IN SAFETY AND SURVIVAL

THERE'S NO LACK of sound information concerning safety and survival. Almost every Navy training publication describes in detail the precautions to be taken in regard to the subject under discussion. In addition, many volumes are devoted solely to one or more aspects of safety.

However, safety is not an exclusive Navy prerogative. Here is a further list of books on the subject, all nonfiction and all interesting:

Dive: the complete book of skin diving by Rick Carrier, 1963. A basic book on skin diving with data on rules, records, techniques and equipment.

Aquatics Handbook, by Milton A. Gabrielson and others, 1960. A how-to survey of water sports written by specialists. The authors give special attention to lifesaving techniques and water safety.

Novy Diver, by Joseph S. Karneke, 1962. A Navy master diver's story of salvage and intelligence diving during a career which spanned World War II and Korea.

Drownproofing; a new technique for water safety, by Fred Lanoue, 1963. A new concept which, the author claims, can keep swimmers or nonswimmers afloat indefinitely.

Swimming ond Diving, U. S. Naval Institute, 1962. Contains instructions on water safety and the mouth-to-mouth method of resuscitation.

Bosic Seamanship ond Sofe Boat Handling, by Blair A. Walliser, 1962.

Donger, Shark! by Jean C. Butler, 1964. Adapted from an extensive technical study Sharks and Survival, edited by P. W. Gilbert, which was sponsored by the Navy, this is a highly recommended survey for laymen.

Shork! by Thomas Helm, 1961. A popular and informative book on sharks and shark attacks with sidelights on the barracuda and octopus.

Dongerous Morine Animols, by Bruce W. Halstead, 1959. A ready reference with excellent illustrations, this book is a source of information for the identification, geographical distribution, habits and characteristics of these animals.

Abyss: the deep sea and the creatures that live in it, C. P. Idyll, 1964. An exploration of the deep which makes up nine-tenths of the oceans, and the strange and curious animals who live there—even including the sea monsters sometimes sighted.

Whot Cores the Sea? by Kenneth Cooke, 1960. The author who survived 50 days on a life raft during World War II here gives a graphic account of his ordeal and the endurance and valor of human beings where faith is the essence of survival.

Seo wos Kind, by Albert Klestadt, 1959. A first-rate story of an escape from the Philippines during World War II in a small open boat.

Roft, by Robert Trumbull, 1942. A day-by-day account of three downed Navy fliers in a rubber raft, who sailed without food or equipment across a thousand miles of the Pacific.

The Hundred Doys of LT MocHorton, by Ian MacHorton, 1962. This true account of individual survival in the Burma jungle shows how a wounded officer living off the land finally rejoined his unit. It gives a vivid picture of courage and human adaptability to extreme conditions.

Living off the Country: how to stay alive in the woods, by Bradford Angier, 1956. An emergency book kit for staying alive in the wilderness with sections on food, warmth, orientation and first aid.

On Your Own in the Wilderness, by Townsend Whelan, 1958. A practical guide to camping and traveling or living in the wilderness.

How to Survive on Lond and Seo, U. S. Naval Institute, 1956. A practical handbook on survival under all conditions and climates. Included are details on food, clothing and shelter.

Survivol Book, by Paul H. Nessbitt, 1959. Emergency landing procedures in all conceivable conditions are illustrated with case histories of survivors. Physical facts about heat, cold, thirst and how to overcome them and how to contact and cooperate with rescue parties are stressed.

Porochute to Survivol, by Herbert Best, 1964. What to do if you find yourself stranded after a parachute jump. Covers survival techniques in all kinds of climate and terrain.

Into the Silk, by Ian Mackersey, 1958. Down from the sky without an airplane; successful jumps in war and peace are recounted in this well researched history.

Escape: from the air and from the sea, by Eloise Engle, 1963. A useful background book on air and sea rescue operations after emergency exits from ships, planes, balloons and —so help us!—space ships.

How to Abondon Ship, by Philip Richards, 1943. Although over 20 years old this book still gives much useful information if you have to take to the lifeboats.

Alone ot Seo, by Hannes Lindemann, 1958. Two solitary voyages, one in an African canoe, the other in a rubber life raft, provided the author with a test of his mental and physical resources against the sea. Interesting descriptions of the birds and fishes encountered and his narrow escapes and adventures.

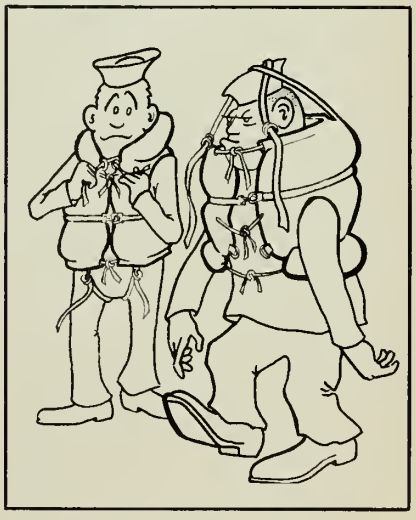
Serpent's Coil, by Farley Mowat, 1962. A true story of a ship abandoned in mid-Atlantic during a hurricane.

Hell at 50 Fathoms, by Charles A. Lockwood, 1962. The evolution of modern survival and salvage methods is illustrated in these tales of U. S. submarines and rescue work.

All-Novy Cartoon Contest
Thomas Robert Gunlock, LTJG, USN



All-Novy Cartoon Contest
Thomas Robert Gunlock, LTJG, USN





IT'S BEAN GOOD—Key West Navymen offer free coffee to passing motorists.

Fast Action Saves a Life

"I didn't have time to think—I just acted."

That was the explanation of Airman Lawrence K. Carlos after he saved the life of a shipmate, Airman William J. Kent, aboard uss *Ticonderoga* (CVA 14).

The incident occurred while the carrier was conducting normal flight operations.

Kent had approached an F-8E *Crusader* from the "blind" side, and was suddenly sucked into the jet's air intake. He grasped the outer edge and held on. His hands were slipping; then he felt someone grab his legs.

It was Airman Carlos. He won the tug-of-war against the air suction. The pilot shut down the engine on signal from one of the flight deck crew. Quick action on the part of Carlos and the others had saved the young airman's life.

After being removed from the intake, Kent discovered that his headgear, goggles and windbreaker were ripped from his body by the suction of the jet intake. But he was still intact, with only minor injuries to remind him of the ordeal.

Carlos was cited for his action by *Tico's* CO.

ON TOP—Swimming tips learned in recruit training may someday save your life. Here, recruits learn how to use their white hats to help keep afloat.



Life Saver of an Idea

A pilot's emergency signal actions previously involved pressing buttons, turning knobs and setting codes; but Donald E. Sadowski, ATCS, has reduced all this to a simple flick of a switch.

The switch is part of the Identification Friend or Foe (IFF) system found in every Navy aircraft. Introduced in 1943, this system identifies by radar all IFF-equipped aircraft.

Briefly, this is how it works: When an airplane approaches within radar range of a control center, the plane's IFF system is signaled. If the plane is friendly, a mark appears on the center's radarscope. If no mark appears, alert planes are dispatched to identify the aircraft visually.

When a pilot signals an emergency, another series of marks appear on the radarscope. This alerts the local control centers that a plane is in distress.

Using only eight parts, Chief Sadowski rigged the IFF system to signal an emergency by flicking only one switch.

It took Chief Sadowski five minutes to figure out, and about three weeks to diagram and complete the paperwork. The total cost of modifying each IFF system—only $20.00.

For his initiative, Chief Sadowski has received commendations from the Bureau of Naval Weapons; Commander Naval Air Force, Atlantic Fleet; Commander Fleet Air, Quonset Point, R. I.; and his squadron commander. The fleet adds theirs.

Man Overboard—Briefly

Crewmembers of uss *Springfield* (CLG 7) can pull a dummy out of the water in seven minutes during a man overboard drill. And they can really get unlimbered when there's an emergency—they recently pulled a sopping wet *Springfield* Navyman out of the sea in six minutes flat.

The live sailor fell into the water while *Springfield* was conducting antisubmarine warfare operations in the Caribbean. Word was passed that a man was in the water and the officer of the deck ordered the rudder swung 30 degrees right. This maneuver swerved the ship's stern away from the floundering Navyman.



SAFETY CONSCIOUS—All seven landing signalmen of the amphibious assault ship *USS Iwo Jima* (LPH 2) help bring down 15,000th consecutive safe landing.

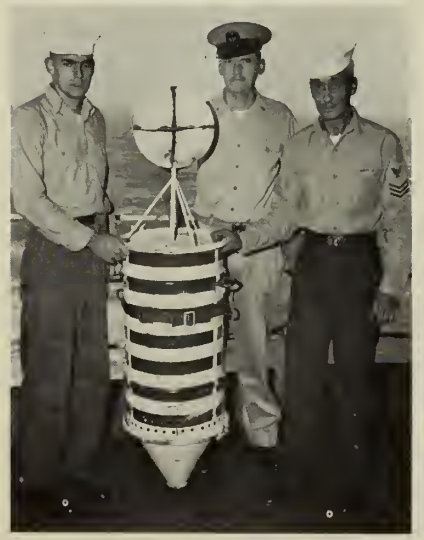
Speed was increased immediately and *Springfield* swung in a wide arc until it approached the area where the man had been lost. Nearing the sailor, who was wildly waving his arms, the OOD backed all engines to slow the ship's advance.

The port lifeboat was lowered as the ship slowed, and minutes later the wet sailor was hauled into the foresheets of the motor whaleboat—six minutes after the first alarm was sounded a record for the ship.

Happy-Meeting

A New York City resident may well owe his life to the crew of USS *Krishna* (ARL 38). The Phiblant repair ship was transiting New York harbor, when the OOD spotted Robert G. Lane clinging to a buoy.

Krishna's CO ordered a boat into the water and the rescue was made. Lane had been stranded for about two hours after his small boat struck a log and sank.



CREATIVE-MINDED Navymen on board *USS Ticonderoga* (CVA 14) pose with buoy they built for marking area in which man is overboard.

Oh Buoy! — It Floats

An oceanographic buoy which Navy scientists hope will withstand 60-foot waves and 150-knot winds is being given its sea trials. The 40-foot disc has been moored in 300 feet of water just off the coast of Florida—during the height of the hurricane season.

If the buoy survives, it'll be towed out to sea and anchored in some 20,000 feet of water. While it bobs around it'll transmit—on 100 channels—information on ocean currents, sea states, temperatures, and wind velocities.

If the ocean data station works as well as expected, similar ones may be placed in all the major ice-free ocean areas.

There have been other buoys which served the same purpose, but the ocean data station is much improved. Old types transmitted on only five or six channels and needed repairs and refueling about every six months.

The buoy also has a memory, of sorts. Information collected will go into two memory banks, one of which will have a 24-hour capacity and the other a one-year capacity. About every six hours the buoy will transmit the information which has been gathered in its short-term bank.

QUIZ AWEIGH

When you need your first oid troining, you'll need it fost. There'll be no no time to bone up on the subject.

How well would you do?

1. When o mon is injured, your first step is to call o doctor, using whotever form of communicotions is ot your disposol. Then, until medicol help arrives you should treot the potient's major injuries in the order of their importonce. What is the correct priority?

(o) Bleeding, respirotian, then shock.

(b) Shock, respiration, then bleeding.

(c) Respirotion, bleeding, then shock.



2. If the pupils of the victim's eyes are reduced to pinpoint size, he moy be suffering from:

(o) Effects of nerve gas.

(b) Shock.

(c) Frostbite.

3. Dilated pupils moy indicate:

(o) Nerve gos poisoning.

(b) Shock.

(c) Frostbite.



4. An injured persan in severe poin moy be given marphine. The stondord dose is:

(o) One-eighth groin.

(b) One-fourth grain.

(c) One-holf grain.

5. Hawever, morphine should never be given if the victim hos:

(a) Severe obdominol wounds.

(b) Head injuries.

(c) Second ond third degree burns.

6. Atropine is the stondord treatment for nerve gas victims. What is the maximum number of injections which moy be given without speciol permission from o competent outhority?

(a) Two. (b) Three. (c) Four.

Answers ta Quiz Aweigh may be found on poge 64.



THE SHIP

ALL HANDS SPECIAL SUPPLEMENT

On 18 March, USS Franklin (CV 13) had participated in strikes against Kyushu airfields. Further strikes were scheduled the following day against targets in western Japan. Forty-five aircraft had taken off for the first mission of the day and 31 were waiting on the flight deck to take off when, without warning, the ship was hit by two bombs from a low-flying Japanese aircraft.

Gasoline and ammunition caught fire and there began a long series of explosions which threatened to destroy the ship. In spite of heavy casualties, the ship's crew fought until the fires were checked, the serious listing of the ship controlled, and steerageway finally regained.

The recovery of Franklin *constitutes a classic in heroism, damage control, leadership and discipline.*

Here, the story of Franklin, *from the time she was struck until she pulled triumphantly into the harbor at Ulithi, is told from several viewpoints. The first is based upon the action report of her commanding officer, Captain L. E. Gehres,* USN.

This is an ALL HANDS "first." These on-the-spot action reports have never been published before.

At 0708, without radar warning, an enemy plane dove out of the base of the clouds from less than 2000 feet altitude, about a thousand yards directly ahead of *Franklin*, made a low-level bombing run, dropping two 250-kilo, semi-armor-piercing bombs with about .25-second delay fuses.

The commanding officer, the navigator, the group recognition officer, the officer of the deck, and two enlisted men were lining the open bridge, searching the clouds ahead and on each bow for this very attack, but it developed so suddenly and so close aboard that the plane was not seen from the bridge.

One bomb struck the flight deck and penetrated to the hangar deck, blowing a large hole through the armored deck, spreading destruction aft through the second deck and down into the third deck.

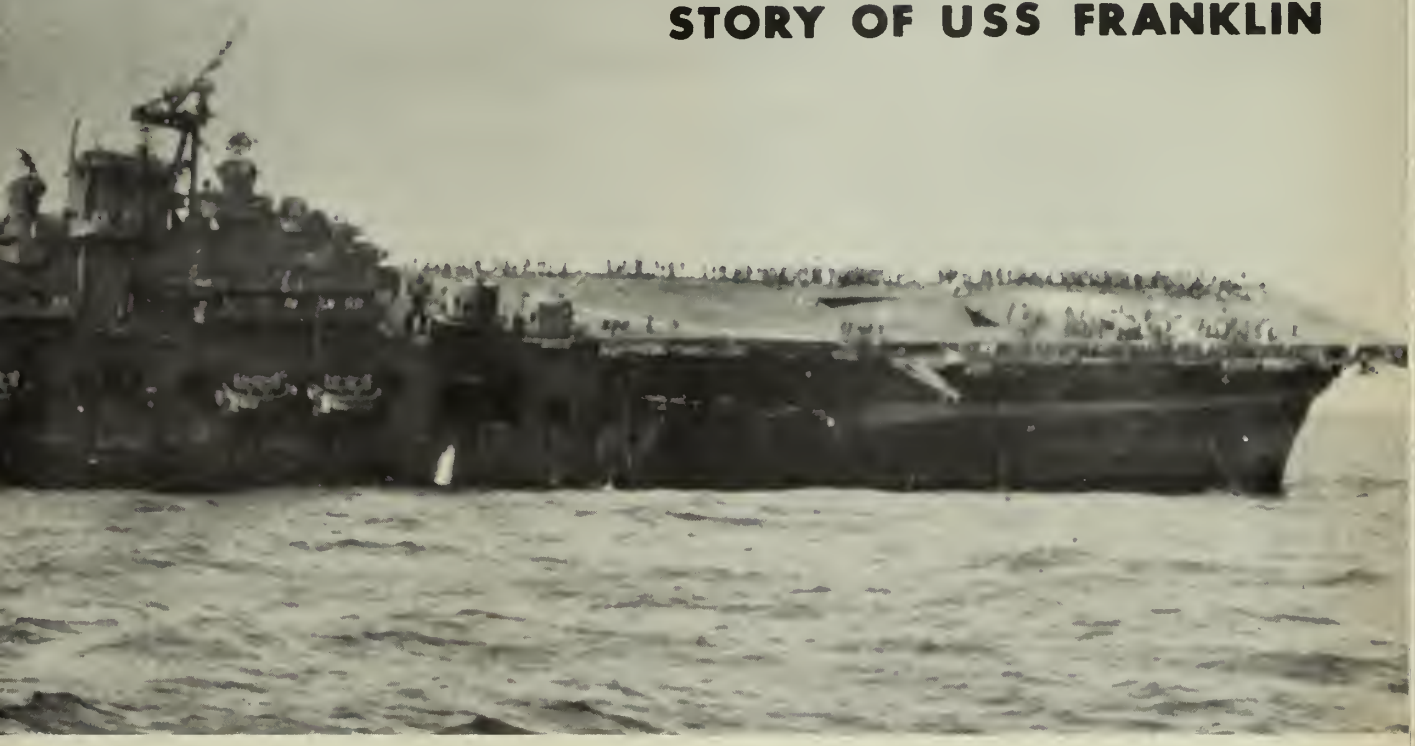
This bomb apparently killed all the personnel in the forward part of the hangar deck, knocked out Combat Intelligence Center and Air Plot, sucked down and wrecked the forward elevator and, in the hangar, started great fires which enveloped the forward starboard side of the ship and flight deck.

The second bomb struck the flight deck and apparently exploded above the hangar deck. This explosion forced the after elevator up and to starboard, and started uncontrollable fires on the planes turning up on deck in the process of taking off, and spread fire and destruction throughout the remainder of the hangar deck.

The concussion of the first bomb knocked me down. Upon regaining my feet, I saw a sheet of flame come from under the forward starboard side of the flight deck and envelop the forward starboard batteries and catwalks, and spread aft over the starboard side of the flight deck. At the same instant, a great column of flame and black smoke came out of the forward eleva-

THAT WOULDN'T BE SUNK

STORY OF USS FRANKLIN



tor well. The smoke coming down the wind enveloped the bridge.

Thinking that the ship had been struck forward on the starboard side by a bomb, and as it was apparent that there was a great fire in the forward end of the hangar deck, I immediately ordered the ship turned to starboard and speed slowed to two-thirds. My intent was to place the wind, already 10° on the port bow, further aft on the port side, to keep the fire forward, and prevent it from spreading aft among the heavily loaded and gassed airplanes on the hangar and flight decks.

As *Franklin* passed narrowly astern of *Bataan* (CVL 29), the smoke from the forward elevator cleared the bridge, which was then immediately enveloped by heavy black smoke from abaft the beam. This was the first indication on the bridge that the ship had been struck amidships.

I made my way to the port side and then as soon as I could get word to the pilothouse, the ship was turned with a full left rudder and standard speed again ordered to bring the wind on the starboard side. At about 0709, the first of a five-hour long series of heavy explosions occurred on the flight deck, where a number of planes were turning up and loaded with a maximum load of general-purpose bombs and *Tiny Tim* rockets.

The explosions of this heavy ordnance spread fire and destruction throughout the ship from the island down to the fourth deck. Fires from the hangar and gallery decks worked upward through the island and eventually all topside five-inch, 40-millimeter, 20-millimeter, ready rocket, and aircraft ammunition lockers and the ammunition in all the gun mounts aft of the bridge, exploded.

At about 0725 we were making about 16 knots with the wind broad on the starboard bow. *Santa Fe* (CL 60) was requested to come alongside to remove the wounded who were being gathered on the forecastle and on the forward end of the flight deck. *Franklin* at this time had taken a list of about 3 degrees to starboard, but was under engine and steering control.

WITH THE FIRST heavy explosion on the flight deck, all internal communications within the ship were lost, except a single sound-powered line from conn to steering aft, from whence another sound-powered line to main engine control was effective. All topside and interior general announcing systems went out, and all radio communications were lost. The main magazines were ordered flooded.

Much later it was ascertained that while the forward magazine sprinkler functioned properly, the after main magazines were never wet down. The valves were properly opened but the water lines leading to them were ruptured.

At about 0931 *Santa Fe* approached and maintained a position about 100 feet off the starboard bow, and started taking our seriously wounded aboard via a trolley. Less seriously injured personnel went over to *Santa*



BURNING FRANKLIN billows fire and smoke after two bomb hits in surprise attack from Japanese dive bomber.

Fe via the forward radio masts, which were down.

At about this time, the firerooms and engine rooms progressively from forward aft reported that the men were collapsing on their stations, and permission was requested to abandon the firerooms and engine rooms.

They were instructed to leave all machinery set and running in present condition (all boilers steaming speed eight knots), to stay as long as possible, and then to vacate the stations. The list was steadily increasing from the free water in the ship settling to starboard.

At about 0945, the ship lost steering control. At about 1000, the ship lost all headway and lay dead in the water, head falling off to starboard. This made it impossible for *Santa Fe* to maintain her position, and she backed rapidly away, snapping all lines.

As soon as Franklin had assumed a steady heading, *Santa Fe* came in fast and boldly on the starboard side, slamming into actual contact, where she was held by use of her engines. The remainder of the seriously wounded were then transferred. All surviving air group personnel were next transferred, and orders were issued from the bridge for heads of departments to send off any enlisted personnel who were not required to work the ship and fight the fire.

Meanwhile, a number of destroyers, notably *Hickox* (DD 673) and *Miller* (DD 535), came up to our stern, picking up personnel from the water en route and took off wounded and other personnel trapped on the fantail. While taking personnel from the ship, *Santa Fe* helped to fight the gasoline fires in the hangar deck amidships.

Heavy explosions continued to occur all during the time *Santa Fe* was alongside. The large 5"/38 ready magazine locker on the flight deck threw heavy and burning debris over the after part of *Santa Fe*, and over the bridge and island structure of *Franklin*.

At this time, concerned for the men huddling forward, I asked my navigator, Commander Jurika, if he thought I should permit them to leave to the safety of *Santa Fe*. He replied that he did not think it was time yet, and the young officer of the deck, Lieutenant Tappen, said nothing but emphatically shook his head.

With this support for my own convictions, *Santa Fe* was informed that all wounded had been transferred, that no more *Franklin* personnel were to come aboard, and she was requested to clear the side, which she did about 1225. This was the only time when anything resembling abandoning the ship was mentioned on the bridge of the *Franklin*.

Request was made to *Santa Fe* for a tow, and *Pittsburgh* (CA 72), which had been rescuing personnel from the water astern, was designated.

At 1254, an enemy *Judy* aircraft made a fast-glide bombing run on *Franklin* from the starboard side. It was taken under fire by all accompanying vessels on that side and its bomb exploded short, about 200 yards on our starboard quarter.

By 1404, *Pittsburgh* had succeeded in getting way on the ship, hauling around to a southerly course, proceeding at about two knots working up to three and a half. By this time, all major explosions on the ship had ceased, although there still were sporadic explosions of 40-millimeter and smaller stuff. The list was steadied at an average of 13° to starboard, the ship down about three feet by the stern, and the fires on the forward end of the hangar deck extinguished, and those in the after part of the hangar deck, in the gallery deck, and in other parts of the ship were gradually being brought under control.

The only fire main pressure available at this time was from the two diesel emergency fire pumps located on the forecastle. Accompanying destroyers continued to come alongside the starboard side and up to the fantail to fight the recurrent fires in the after part of the ship.

During the night, engine room and damage control personnel succeeded in returning to one of the firerooms, and in the early morning of 20 March, were able to light off three of the boilers. With this assistance, *Pittsburgh* was able to tow at six knots. Steering was very difficult because, due to the heavy starboard list, *Franklin* persisted in steering up to port and sailing to windward, dragging *Pittsburgh's* stern around.

Throughout the night, fires broke out in various parts of the ship, including the flight deck, and the fire parties, hampered by darkness and the indescribable wreckage, had their hands full.

At about 2200, counterflooding operations to reduce the list were commenced. As Damage Control Central was inaccessible, and the hydraulic controls of the counterflooding valves were out of commission, officers and men had to make their way below on the port side forward with rescue breathers to find and open the valves to flood the forward port voids. Their instructions were to reduce the list to about 5° starboard and hold it there, as the ship was heavily flooded both below decks and in the gallery decks, with a great deal of free water surface.

Counterflooding operations got out of control, however, and at about 0200 on the 20th, the ship rolled to port and stayed there with a list of about 10°. No further counterflooding operations of any kind were attempted after that. By 1000 on the 20th, with four boilers on the line, the ship was making turns for six knots, though still in tow. By 1200, speed had been worked up to 14 knots. At 1233, the towline was cast off, *Pittsburgh* hauled clear, and the ship's own speed gradually worked up to 15 knots at 1405.

UNTIL DARK, numerous bogeys were reported, some of which were real, and some of which were our own Combat Air Patrol. During that night we worked up to 18 knots. Flares and firing could be seen during the first and mid-watches on the horizon astern, where groups of enemy aircraft encountered other task groups, where they apparently expected to find our ship helpless.

By this time the ship had four boilers steaming, the after two engines operating normally, and auxiliary steam from the after plant going through the turbo-generator cross connection into the forward engines, thus obtaining some thrust instead of a dead drag from the outboard propellors.

Ventilation in engineering spaces had been restored. One gyro compass was in operation, and a repeater cut in on the bridge, and all but a few stubborn fires on the gallery deck, the captain's cabin, and in some of the lower spaces aft were out. The forward port five-inch battery, the bow 40-millimeter, and the bridge 40-millimeter were in commission, and a sound-powered telephone system had been jury-rigged from the bridge to these batteries.

BEGINNING WITH DAWN and continuing into the day, the personnel remaining on board (about 300 men and 100 officers fit for duty out of a total of 500 men and 106 officers on board) turned to to extricate the bodies tangled in the interior wreckage of the ship.

At 1151 a *Betty* started a fast low run-in on the starboard quarter, and was splashed by the Combat Air Patrol with a very violent explosion on the water within sight of the formation, about eight to 10 miles away.

Several times during the day, speed had to be reduced because of difficulty with the feed water supply and because of salt water in the fuel oil, but these difficulties were overcome. Before dark on this day, a portable radar had been set up on the bridge, and was operating within its limitations, and one radio receiver had been placed in commission, although our only means of transmission was still a battery-powered walkie-talkie. Hot fires were still burning in the gallery deck and commanding officer's cabin country. This latter was finally cooled down on the evening of the 21st, and extinguished on the 22nd.

During the night of the 21st, *Franklin* with her escorts proceeded at an average speed of 19 knots to a rendezvous with Task Force 58 in the fueling area. On several occasions, fires broke out on the fantail in the after part of the ship where gasoline was still leaking from the unsecured gasoline system but these fires were brought under control by the ship's company.



BLAST UPON BLAST increases damage aboard *Franklin*, causing new injuries and the loss of additional lives.



INFERNO AT SEA—Leaking gasoline and ammunition caused explosions, making damage control difficult.

BY 0700 on the morning of the 22nd, the list had been reduced to 6° to port by pumping and by jettisoning two batteries of burned out 20-millimeter guns and their mounts from the port side. On this day, the antenna of the forward radar was salvaged from the wrecked foretopmast, mounted on the platform on the port side of the smoke stack, hooked up by jury-rigged cables to the flag plot radar receiver, then connected to the remote Plan Position Indicator on the navigating bridge. By sunset it was operating reliably and accurately.

At daylight, the Task Unit fell in with Task Force 58, *Franklin* joined formation with *Enterprise* and *Wasp*, and reported to Commander Task Group 58.2. In the afternoon *Franklin* and three accompanying destroyers proceeded on a course to Ulithi at approximately 20 knots. The voyage to Ulithi was without incident, this ship operating independently, five miles in advance of the task group. En route to Ulithi, the work of extricating, identifying and burying over 400 bodies continued, and clearing of the wreckage in the hangar deck was gotten underway. Additional guns were placed in commission and some of the more essential power, light, and telephone lines repaired or replaced. At noon on 24 March, *Franklin* took her place in column astern of *Wasp* and *Enterprise*, entered Ulithi in formation, and at 1414, anchored in berth assigned.

That's how the commanding officer saw it. LCDR David Berger, USNR, *assistant air officer, gives this supplementary account of the attack on* Franklin, *and her recovery, with additional details. Here is a condensed version of his eyewitness report:*

AT FIRST I was unaware of what had happened because of the concussion but shortly afterward I noticed a great tongue of red flame shoot out from the hangar deck at the deck edge elevator on the port side of the ship. Immediately, the entire ship appeared to be enveloped in clouds of heavy black, acrid smoke. This smoke pinned me up against the side of the island structure and for a while I believed that I was going to

be suffocated. However, somehow I made my way up topside to sky forward and managed to move through this cloud of smoke down a line on the starboard side which took me to the 40-mm gun sponsons.

At that point, I believed I would have to jump off the ship because of the intensity of the smoke. Lacking oxygen I felt that I was faced with no other recourse: Either to jump through this heavy smoke into the sea below or stay aboard and be suffocated. However, the ship turned at that moment which enabled me to get some oxygen which revived me.

While this was going on, there were tremendous explosions. I found myself with a group of men at the 40mm guns. We immediately set to work jettisoning hot ammunition. We emptied some of the ready magazines and then I went up topside to the 20mm mounts, starboard side, where we did the same thing.

From that point on my own participation consisted principally in fighting fires on the flight deck and in and around the various island structures. The ship itself was being subjected to a series of very heavy explosions and the fires which followed were the result mainly of our own bombs, rockets and other armament exploding. We had a large number of aircraft on the flight deck and the hangar deck all gassed up and armed and ready for launching. Very shortly after the first explosion these various types of incendiaries and explosives went up, causing more fires.

FOR A WHILE it seemed as though it would be impossible to save the ship, because there seemed to be no end to these explosions. In the meantime, the forward part of the ship appeared to be in a little better shape. Sometime around 0830, *Santa Fe* was brought sharply up alongside the ship, starboard side, coming so close that it was possible to evacuate many wounded, some of whom were seriously injured and many of whom would not have been able to reach safety had it not been for *Santa Fe*.

After the air group had been evacuated as well as the wounded and seriously injured, and those who were otherwise unfit for duty, the captain ordered *Santa Fe* to haul away and then began to get the ship under tow. After a long struggle in the midst of all the confusion, with the aid of a group of steward's mates, Commander Taylor, Executive Officer, succeeded in rigging a tow line to *Pittsburgh*.

In the meantime, the ship proceeded for a while under power but then became dead in the water. The wind was such that the ship drifted toward the main Japanese Islands and it is my understanding that at one point we were within 40 miles of the island of Shikoku.

After the ship was under tow there still remained a considerable number of fires to put out. As a matter of fact the fires lasted for approximately 15 hours, and late that night fires were still burning.

During the course of one attempt to put out fires, I personally recollect being on the flight deck when another Japanese aircraft came in and made a low-level attack on *Franklin*. Looking about for a foxhole, the closest thing I could find were the forward five-inch gun mounts which were quite hot and ready to explode. However, as a result of heroic action by members of *Franklin's* crew, particularly Chaplain O'Callahan, the forward five-inch guns had been flooded and were kept down below the exploding point.

IN ANY EVENT, this particular aircraft came in and made a beautiful bombing run on the ship. Fortunately for us, the 40mm mount above the pilot house was manned by a group of volunteers. Shortly after the first explosion, this gun had been put out of commission electrically; however, it was possible to operate it manually. The captain's orderly, a yeoman and several other volunteers went topside to this 40mm gun and operating it mechanically, fired so accurately that they were able to drive off the attacking aircraft, forcing him to pull up sharply so that his bomb was a near miss astern rather than a direct hit amidships.

Sometime on the 20th I recall being on the hangar deck with a working party jettisoning worthless material and dangerous substances, burying bodies, when again *Franklin* was put under attack, and this time it was even more difficult to find a foxhole. However, nothing



SOUL SHAKING series of explosions set off fireworks lasting for hours, resulted in leaving carrier at 10° list.



JETS OF FIRE envelop five-inch gun mount. Men in *Santa Fe* fought blaze by aiming hoses through hatch at rear.

serious happened and we continued to do our work.

As I recall there were quite a few alerts during the 20th, all of which caused the nerves of the crew of *Franklin* to be very much jangled. We were all very jittery from lack of sleep and what had happened the previous day and all these various alerts of bogeys being around and the noise of the ship's guns, such as they were, firing and those of the guns of the force did a great deal to unstabilize further the emotions of the people who were aboard the ship.

IT WAS CURIOUS that we did not know how many people we had aboard. Of course, it was impossible for anybody to know how many had been left. There were so many people we saw forced off the ship and a great many had gone over to *Santa Fe* alongside that we didn't know exactly how many people we had left aboard. Our first suspicion was that we had only 50 officers and 250 men. However, on the 22nd of March while we were still considered to be in the forward area, but when we had begun to make some progress in burying bodies and cleaning up the wreckage, we took a muster and it developed that we had a total of 704 people aboard.

At this muster, the Air Department was found to have but 27 men out of its original total (including the air group) of approximately 1100.

We immediately got things going in as routine a fashion as possible and even put out a plan of the day on the 23rd of March, with a masthead which stated "A Ship That Won't Be Sunk, Can't Be Sunk" and such has been the slogan of *Franklin* ever since.

On the entire trip back from Ulithi to Pearl and from Pearl to Panama, *Franklin* made very good speed and always seemed to me to be making in excess of 20 knots. The trip to Pearl and thence to Panama was uneventful. Throughout, Captain Gehres ordered the officers and men of *Franklin* to carry on with their work of clearing up the wreckage, of extricating bodies from various charred spaces and generally cleaning up the ship. By the time the ship arrived at Panama it was hard to recognize her as the same *Franklin* which was so badly battered and bruised but not broken, on the 19th.

The executive officer, Commander Taylor, was all over the ship, it appeared, almost simultaneously and was actually one of the greatest fire-fighters of the day. In addition, his performance on the forecastle in getting the ship under tow was very thrilling and had a terrific effect on the morale of the ship because once we got under tow we all felt considerably better than when we were dead in the water and drifting toward Japan.

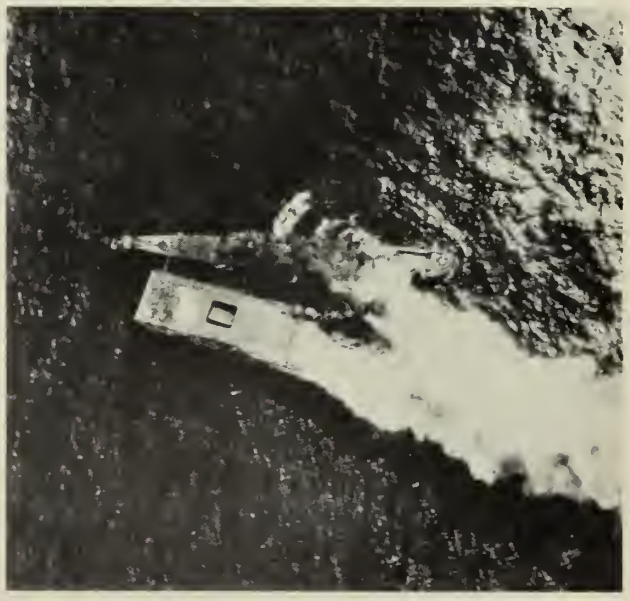
THE CATHOLIC chaplain, Father O'Callahan, was very inspiring as he proceeded up and down the flight deck in his tin hat with a large white cross painted on it. He was one of the outstanding leaders in fighting the fires and he could be observed by everybody topside as he would give the last rites of the Church to the dying men and then very shortly afterwards would lead parties into the smoke and flames. On more than one occasion I saw him carrying bombs and ammunition, all of which had been heated to the exploding point, over to a ramp where they could be jettisoned from the ship. His actions throughout were such that we were all inspired by him.

There was another story which I personally did not observe but which we all heard about very shortly after it happened and that was the action of a lieutenant (junior grade) by the name of Gary who saved 300 men who had been trapped in a compartment on the third deck aft. We had heard reports topside that a large number of personnel were trapped in this compartment and some time afterwards they began to make their appearance up on the hangar deck and the flight deck and then the word got to us that Lieutenant (jg) Gary, who had been in the compartment, had saved the men.

There was one other officer, Lieutenant Commander Fuelling, a flight medical officer, who also was in that compartment and who was instrumental in calming the men. However, Gary took control of the situation and stated that he would find some way out of that trap and that he would come back for them. He



SANTA FE lies alongside the flame-ridden *Franklin* fighting raging gasoline fires on hangar deck level.



ASSISTANCE from *Santa Fe* included fighting fires and taking injured aboard from the disabled carrier.



Franklin On the Move Again

The aircraft carrier Franklin *(CV 13) took a trip a couple of months ago. But this could hardly compare with the grueling voyage described in our special supplement.*

She changed resting areas at the Naval Supply Center, Bayonne, N. J.

Franklin *has been part of the Atlantic Reserve Fleet since February 1947.*

The new berths will give greater protection against the elements and will also permit better port operations. The move will make available more docking space and expedite dredging operation to accommodate a large variety of ships.

Another member of the mothball fleet, the antisubmarine warfare carrier Leyte *(CVS 32) was moved at the same time.*

then proceeded out through the smoke-filled spaces; all this while the horrible explosions were continuing and he was able somehow to find a way of egress to the flight deck aft. He made numerous trips back to the compartment, each time leading out a group of men in human chain fashion until all of the 300 men, Dr. Fuelling last, were led to safety.

Dr. Fuelling then went up to the flight deck where he carried on with his regular duties as a flight surgeon while the ship was being attacked and while further explosions and fires raged.

THE NEXT DAY, the 20th, we were still very close to the main Japanese Islands and as a matter of fact were put under attack by Japanese aircraft. However, all through the 20th Captain Gehres had ordered the officers and men to take steps to clear up the wreckage, extricate bodies from charred spaces and begin burials.

The hangar deck was a mass of tangled "I" beams. The deck had been smashed up. There were still slight fires, smoldering embers and there was a great deal of work to be done.

The fire-fighting efforts continued both on the flight and the hangar decks and in the island spaces all day and through the night.

Getting back to the towing operations I distinctly recall one time when we were put under attack when all the guns which were available on *Franklin,* and various guns of the screen were firing, (although I personally expected the captain of *Pittsburgh,* which was the cruiser towing us to break the tow line because we were making only four knots) *Pittsburgh* continued to tow us and fire at the same time, which gave us a considerable lift in morale.

Throughout the entire engagement, the actions of *Pittsburgh* and *Santa Fe* served as a great inspiration and help to the members of *Franklin* who were left aboard to put out the fires and save the ship.

That night the Japanese sent a large force of aircraft out to finish off *Franklin.* Because Admiral Mitscher had placed a large task group between us and the Japanese coast, 41 Japanese aircraft were shot down in an effort to sink us that night. The ships of our force were fired on on various occasions but to my knowledge none of the attacking Japanese aircraft got through the screen to attack us.

There is a sharp emotional break when you lose your ship. You feel like crying when you see it go down. However, if you're fortunate, you're picked up by another ship and you begin a new life and the problem of very existence itself is such that your attention is directed away from your old ship and to your new life.

In this case, those of us who remained aboard *Franklin* were faced with the constant picture of the horribly mangled ship and the tremendous number of dead and large number of bodies which had to be extricated from charred and broken spaces. This went on for a considerable time and I daresay that it was Captain Gehres' policy of working everybody as hard as possible which had a lot to do with the morale.

The following is a condensed account of the notes taken during the action by the ship's navigator, CDR Stephen Jurika, Jr.

AT 0708, while searching the sky overhead and ahead for aircraft, two bombs flashed into my field of vision and hurtled toward *Franklin.* I did not see the enemy aircraft but glimpsed the shadow as it flashed past the island structure at about masthead height. The two five-inch mounts forward of the island commenced firing just as the bombs hit the flight deck and continued firing as they trained aft to follow the plane in its flight.

The first bomb, which I estimated to be of 250-kg size, entered the flight deck abreast the bridge, just after a plane had cleared the forward elevator. The second bomb swept past the island and landed somewhere aft among the planes in the park, ready to come out of their spot for launching.

The forward elevator was lifted about a foot above the flight deck and then collapsed suddenly. It cocked over at a 45-degree angle and did not budge or even sway with the other explosions which followed. Simultaneously, tongues of billowing flame and heavy, acrid, black smoke curled over the edge of the flight deck from the hangar deck beneath. Only a few seconds after the first bomb burst, the second one exploded. Many of the planes on deck were tossed a foot or so above the deck, propellers whirling and cutting into other aircraft. Dense smoke poured out of the side of the ship and blew over the flight deck, obliterating it from my sight.

Through occasional breaks in the heavy pall of smoke which enveloped us, I could see *Bataan,* apparently at full speed, turning to starboard and crossing ahead, clear by only a few hundred yards. Just a few seconds

later, a series of extremely violent explosions commenced setting off fireworks which lasted for hours.

THE EXPLOSIONS which followed were soul-shaking. The ship shuddered, rocked under the impacts and emerged from periods of vibration only to be rocked by other heavy blasts. Fifty-caliber ammunition in the planes on deck set up a staccato chattering and the air was well punctuated with streaks of tracer. Twenty- and 40-millimeter ammunition went next as the gallery mounts caught fire. *Tiny Tims* from the *Corsairs* parked aft on the flight deck took off with an eerie whooshing sound. I saw two pass us on the bridge off to starboard, strike the sea and ricochet for several hundred yards. Others took off up the flight deck.

At 0815, ammunition was still exploding on both flight and hangar decks and the smoke obscured the entire ship abaft the island. *Santa Fe*, on our starboard quarter, sent a semaphore message, "Are your magazines flooded?" Since most communications in the ship were out, the captain could only reply "Am not sure, but believe so." *Santa Fe* approached to starboard and rigged two lines over which the wounded were passed to the cruiser.

At 0952 the most terrific blast of the morning resulted from a five-inch ready service magazine being set afire. The ship felt as though it were a rat being shaken by an angry cat. Whole aircraft engines with propellers attached and debris of all description were flung high into the air and descended on the general area like hail on a reef. One engine and prop struck the navigating bridge a glancing blow about three feet from my head, and for a couple of moments I will admit to ducking under the overhang of the masthead light. By now the list had increased to eight degrees to starboard, and continued increasing at approximately one degree every 10 minutes.

SANTA FE could not maintain her position alongside because of our lateral drift, so at 1015 she cast off, circled, and then made a most magnificent, seamanlike approach which brought her alongside as though she were a well handled gig making a liberty float at Long Beach. *Franklin* lost all headway and began drifting.

Two forward, starboard antenna masts were damaging *Santa Fe's* forward section, and the 40mm mounts on *Franklin's* starboard side were acting as fenders for the cruiser's stern. Men from *Franklin* began streaming over to the cruiser via the antenna masts forward, by hand lines rigged from the forecastle, and from the hangar deck over the 40mm mounts. Wounded were shuttled from just forward of *Franklin's* five-inch turrets to *Santa Fe's* side five-inch mounts, which were being badly beaten up by the relative motion of the ships. The 40mm sponsons on *Franklin's* starboard side tore the deck plating from the cruiser's side and inflicted other damage.

During all this time, fires on the flight deck were being fought with great courage and determination. The chaplain, Lieutenant Commander O'Callahan, in particular was everywhere at once, leading men, officiating at last rites for the wounded and dying, manning hoses and doing 10 men's work. Every time an explosion occurred men would duck for an instant, then those still alive and able would pick up where they left off.

The only means of communication on *Franklin* was



WITH LOST POWER *Franklin* lies dead in water. Unable to hold her position, *Santa Fe* backs rapidly off.



SURVIVORS AND INJURED are shown on flight deck of *Franklin* as they wait to be transferred to *Santa Fe*.



GROTESQUE STEEL seems an impossible task to clean up, with remaining small fires still to be extinguished.

the X1JV sound powered line to steering aft, where five men were trapped. Signal halliards had been burned and carried away. All searchlights were inoperative. The intercom was out of commission and the radios and TBS, through fire and loss of power, were not functioning. The SG radar on the mainmast had toppled to the flight deck and the SK radar was smashed by the foretopmast, threatening to crash down onto the navigating bridge at any moment.

THROUGH THE slowly diminishing smoke, at 1115, I saw the cruiser *Pittsburgh* off our port bow, preparing to take us in tow. At 1245 every ship in our vicinity began firing with five-inch and automatic weapons at a *Judy* which dived out of the clouds on us. The bomb was a near miss to starboard. The explosion lifted *Franklin* appreciably and our list increased to 13 degrees to starboard. The inclinometer was carefully watched. At this time, when fires were still raging all over the after section of the ship, gasoline began spilling over the side and burning on the water. Battle Two then burned to a crisp. Bombs from our aircraft were blown into the air and came back down and exploded. Ready rockets on the third deck let go with a resounding roar and our position, only 52 miles from Ashizuri Saki, on Shikoku, Japan, seemed at low ebb.

The captain leaned over towards me, and above the noise, asked for my opinion on allowing all the men forward to abandon the ship. After considering a moment, I replied "Not yet," and was delighted to see the officer of the deck, Lieutenant Tappen, shake his head in an emphatic "No." No further mention was ever made of leaving *Franklin*.

At 1304, fighters splashed another *Judy* about seven miles from the ship.

At 1404, *Pittsburgh* started towing us, but instead of positioning herself and getting way on us, she towed at right angles, trying to swing *Franklin* toward the south. We called steering aft from conn and asked that hand gear and tackle be used to shift the rudder from amidships to three degrees right. The tow then proceeded, *Pittsburgh* reporting us headed south at five knots.

At 1505 *Franklin* was headed 180 at six knots, under tow. Our position at 1652 was approximately 55 miles from Shikoku.

AT 1700, fires on the flight deck were under control as far back as #3 elevator. The deck was a shambles of burned, warped and broken wood and steel, with bodies, debris and wreckage littering the entire area. Holes were cut into the flight deck and hoses were poked through in a attempt to quell flames still burning on the gallery deck.

When by officer messengers, usually heads of departments, word finally reached the bridge of the condition of *Franklin*, our outlook seemed quite hopeful. The engineer officer investigated the condition of the engines and firerooms and reported that as soon as the spaces cooled sufficiently to permit habitability the machinery could probably be coaxed into action. An investigation was begun on the condition of all accessible spaces.

Canned pork sausage and orange juice arrived on the bridge at 1935. With one piece of bread, the ensuing meal was a gourmet's delight (my last meal being dinner the night before).

All through the night I stayed on the bridge, trying to be of assistance. Occasional fires broke out during the night and parties from the damage and engineer command center set up in the warrant officers' wardroom would proceed to the scene. At least twice during the night destroyers in the disposition spotted flames on *Franklin* and came alongside with all hoses pumping to give assistance.

Before daylight, the engineers had fires lighted under the after boilers and, proceeding cautiously, succeeded in building up power. At 0930 steering control was regained on the bridge.

It was an extremely comforting sight at daybreak to find ourselves surrounded by many ships, including *Guam, Alaska, Pittsburgh, Santa Fe* and several destroyers.

That is the story of USS Franklin, *the ship that wouldn't be sunk.*

HOME AGAIN—After long struggle, the proud, battered *Franklin* and her men near Brooklyn Bridge in New York.



DECORATIONS & CITATIONS



"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

* FELT, Harry D., ADM, USN, for service as Commander in Chief, Pacific, from July 1958 through June 1964. Admiral Felt combined sound judgment and political acumen with an extraordinary ability to command large military forces. During a period of continued turbulence, unrest, and armed conflict in the Pacific Command, marked by a crisis in the Taiwan Straits in 1958, a series of crises in Laos extending from 1960 to the present, and continued turmoil in Vietnam culminating in the current crucial operations against the Viet Cong, he demonstrated exceptional military and diplomatic skill in positioning forces and taking actions to meet the threat of aggression. As U.S. Military Advisor to the Southeast Asia Treaty Organization, ADM Felt, by his unwavering fairness and objectivity, earned the respect, admiration, and trust of the representatives of all member nations.

* GANO, Roy A., VADM, USN, for service during the period 1 Jun 1961 to 30 Jun 1964 as Executive Director for Ocean Transportation and as Commander Military Sea Transportation Service. Responsible for directing the complex military logistical sea lift operations of the Department of Defense, VADM Gano succeeded in improving the responsivenes of the military sea lift in emergencies; enhanced the understanding of the complementary roles of military and merchant shipping to provide greater readiness to meet emergency demands; and made available and effectively utilized ocean shipping to meet military requirements promptly and efficiently during the Berlin build-up, the Cuban crisis and the critical periods occurring in the area of Southeast Asia.

* PHILLIPS, Robert A., Capt, MC, USN, for service as Commanding Officer, U.S. Naval Medical Research Unit No. 2 from 13 Sep 1955 to 29 Feb 64. Responsible for establishing and directing Naval Medical Research Unit No. 2, CAPT Phillips effectively supervised its activities in the field of research and treatment of tropical diseases and medical disorders in the WestPac Area. Under his skillful direction, new methods for field treatment of cholera were developed and successfully applied to bring quickly under control serious outbreaks of this disease in East Pakistan, the Philippines, Korea and Vietnam; a vaccine which promises ultimate control of trachoma has been developed; invaluable research on parasites in man and animals in North Borneo has been conducted; and extensive encephalitis research in Indonesia has been conducted.



"For heroic conduct not involving actual conflict with an enemy . . ."

* ANDERSON, Richard E., LCDR, CEC, USN, for heroism on the afternoon of 25 May 1964 while serving at U. S. Naval Ammunition Depot Bangor, Bremerton, Wash. Witnessing an automobile accident in which a gravel truck hit the rear of an automobile which landed in a ditch and burst into flames, LCDR Anderson, along with a companion, immediately went to the assistance of the woman driver of the burning vehicle who was trapped in the flaming wreckage. Breaking the window on the driver's side with an expended fire extinguisher, LCDR Anderson entered the vehicle through the window and partially effected the rescue of the unconscious victim by moving her closer to the open window before he, himself, was almost overcome by the dense smoke. Assisted from the automobile by his companion, who completed the rescue, LCDR Anderson, by his prompt and courageous actions in the face of great personal risk, was directly instrumental in saving the life of the woman.

* CLEMENTS, Edwin H., III, AM3, USN, posthmously, for heroism on the afternoon of 15 Apr 1964 while serving on board USS *Enterprise* (CVAN 65). As a member of the Enterprise Skin Diving Club, Clements, along with his usual diving partner, was engaged in a Scuba dive to a depth of approximately 160 feet off the Isle of Capri, Italy, when his partner experienced trouble which rendered him unconscious. Clements attempted to share his air supply with his companion and, when this proved unsuccessful, inflated the victim's life vest and his own in a desperate bid to prevent his friend's death by drowning. Upon reaching the surface of the water, he immediately administered mouth-to-mouth resuscitation to the unconscious man until he himself lost consciousness. The rapid rise from a depth of 160 feet to the surface resulted in a decompression sickness from which Clements did not recover. His courageous and selfless efforts in behalf of his partner, who also succumbed, were in keeping with the highest traditions of the U. S. Naval Service.

* GILMORE, Gordon R., LT, CEC, USN, for heroism on the afternoon of 25 May 1964 while serving at U. S. Naval Ammunition Depot Bangor, Bremerton, Wash. Witnessing an automobile accident in which a gravel truck hit the rear of an automobile which landed in a ditch and burst into flames, LT Gilmore, along with a companion immediately went to the assistance of the woman driver of the burning vehicle who was trapped in the flaming wreckage. After his companion had entered the vehicle through a broken window and had partially effected the rescue of the unconscious victim by moving her closer to the open window before he, himself, was almost overcome by the dense smoke, LT Gilmore assisted his comrade from the automobile and then entered the vehicle to complete the rescue. By his prompt and courageous actions in the face of great personal risk, LT Gilmore was directly instrumental in saving the life of the woman.



"For heroic or meritorious achievement or service during military operations . . ."

★RAGAN, Charles P., LT, USN, for meritorious service during the period 12 Apr 1963 to 9 Apr 1964 as a member of the U.S. Navy Section, Military Assistance Advisory Group, Vietnam, and serving as U.S. Navy Advisor to the Vietnamese Navy 22nd River Assault Group. Participating in 13 combat operations against the Viet Cong during this period, LT Ragan displayed outstanding courage, leadership, and professional skill in the face of hostile fire, providing an inspiring example to the Vietnamese Navy and contributing significantly to the molding of the 22nd River Assault Group into an effective fighting unit.

TAFFRAIL TALK

OSCAR IS AN IMPROVEMENT over the wooden keg used by the old Navy in "Man overboard" drills, but he is still not the ultimate in realism. It's just downright difficult, it seems, for a ship's crew to get all worked up over a hunk of kapok.

Now, if it was a *real* person out there, the situation would be different.

The crew of USS *Enterprise* (CVAN 65) proved this to be the case with 24 pilot volunteers.

Although most of the *Enterprise* crew could also have benefited, it was impractical to include everyone, so many were forced to watch, however reluctantly, from the catwalks.

At the appointed hour the pilots showed up, dressed to the teeth in their flight suits with attached Mae Wests, signal lights, dye markers and other miscellaneous gear. The men were put in boats, carried a reasonable distance from the ship, and dropped in the drink.

The water was churned up in a flurry of activity. The victims splashed, yelled, activated dye markers and generally behaved as if this were the real thing, not just a drill. Relatively high winds and choppy seas added authenticity to the operation.

Much of the frantic waving was directed at the helicopters, stationed overhead for obvious reasons. When the helo pilots decided a particular victim had just about had enough he would swoop his craft down and hold steady until the man was plucked from the water. This was excellent rescue practice for the helo crews.

The operation was prolonged somewhat when several of the more hardy victims insisted on going back for seconds. When it was finally completed and all—repeat, all—24 pilots were back on board, the test was pronounced an unqualified success.

The impact on future man overboard drills is open to speculation but as a combined happy hour-trainmg session, it was unsurpassed.

★ ★ ★

On the subject of the sea, our Editor-in-Charge-of-Irrelevant-Statistics burst in upon us, a while back, triumphantly waving a copy of the Naval Weather Service *Bulletin*. It seems that LCDR R. H. Sullivan had been playing fast and loose with his slide rule and science notebooks while considering the military applications of oceanography. We learned a number of things we didn't know.

He describes an exceedingly valuable substance to be found in the ocean. This substance has the highest heat capacity of all solids and liquids except NH_3, possesses the highest latent heat of evaporation of all substances, exhibits the highest surface tension of all liquids, conducts heat better than all other known liquids, and comes closest to being the universal solvent, so long sought by ancient and modern alchemists. Its chemical formula is relatively simple—H_2O. It's better known to the layman as water.

The ocean also contains, LCDR Sullivan reminds us, a considerable number of minerals. After sufficiently confusing us with his recital of so many billions or trillions of tons of copper, boron, uranium, silver and gold, he confesses that he became intrigued with the amount of arsenic in the ocean. Here, too, there is a sizeable amount, but nothing for us swimmers to worry about.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the seo ond is a reody force on wotch ot home and overseas, copoble of strong oction to preserve the peace or of instant offensive oction to win in wor.

It is upon the mointenonce of this control thot our country's glorious future depends. The United States Novy exists to make it so.

We Serve with Honor

Tradition, volor ond victory are the Navy's heritoge from the post. To these may be added dedicotion, discipline and vigilance os the wotchwords of the present and future. At home or on distont stations, we serve with pride, confident in the respect of our country, our shipmates, and our fomilies. Our responsibilities sober us; our adversities strengthen us.

Service to God ond Country is our speciol privilege. We serve with honor.

The Future of the Navy

The Novy will olwoys employ new weapons, new techniques ond greoter power to protect ond defend the United Stotes on the seo, under the sea, ond in the oir.

Now and in the future, control of the seo gives the United Stotes her greotest advantoge for the mointenonce of peoce ond for victory in wor. Mobility, surprise, dispersol ond offensive power ore the keynotes of the new Novy. The roots of the Novy lie in a strong belief in the future, in continued dedicotion to our tosks, ond in reflection on our heritoge from the post.

Never hove our opportunities ond our responsibilities been greoter.

ALL HANDS The Bureou of Noval Personnel Coreer Publicotion, solicits interesting story moteriol ond photographs from individuals, ships, stotions, squodrons and other sources. All material received is corefully considered for publicotion.

Here ore o few suggestions for preparing ond submitting moteriol:

There's o good story in every job that's being performed, whether it's on o nuclear carrier, o tugboot, in the submarine service or in the Seobees. The mon on the scene is best quolified to tell whot's going on in his outfit. Stories about routine doy-to-doy jobs ore probobly most interesting to the rest of the Fleet. This is the only woy everyone can get o look ot all the different ports of the Novy.

Research helps moke o good story better. By talking with people who are closely reloted to the subject moteriol o writer is able to collect mony additional detoils which add interest and understonding to o story.

Articles obout new types of unclossified equipment, research projects, all types of Novy ossignments and duties, ocodemic ond historical subjects, personnel on liberty or during leisure hours, ond humorous and interesting feoture subjects are oll of interest.

Photographs are very importont, and should occompony the orticles if possible. However, o good story should never be held bock for lock of photographs. ALL HANDS prefers cleor, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smortly and correctly when in uniform, and be identified by full nome ond rote or rank when possible. Locotion ond generol descriptive information and the nome of the photographer should also be given.

ALL HANDS does not use poems (except New Yeor's doy logs), songs, stories on change of commond, or editoriol type articles. The writer's nome and rote or rank should be included on on orticle. Moteriol timed for o certoin dote or event must be received before the first day of the month preceding the month of intended publicotion.

Address moteriol to Editor, ALL HANDS, 1809 Arlington Annex, Novy Department, Woshington, D.C. 20370.

ANSWERS TO QUIZ AWEIGH

Quiz Aweigh is on page 53.

1. **(c) Give artificial respiratian.**
2. **(a) Nerve gas.**
3. **(b) Shock.**
4. **(b) One-fourth grain.**
5. **(b) Head injuries.**
6. **(b) Three.**



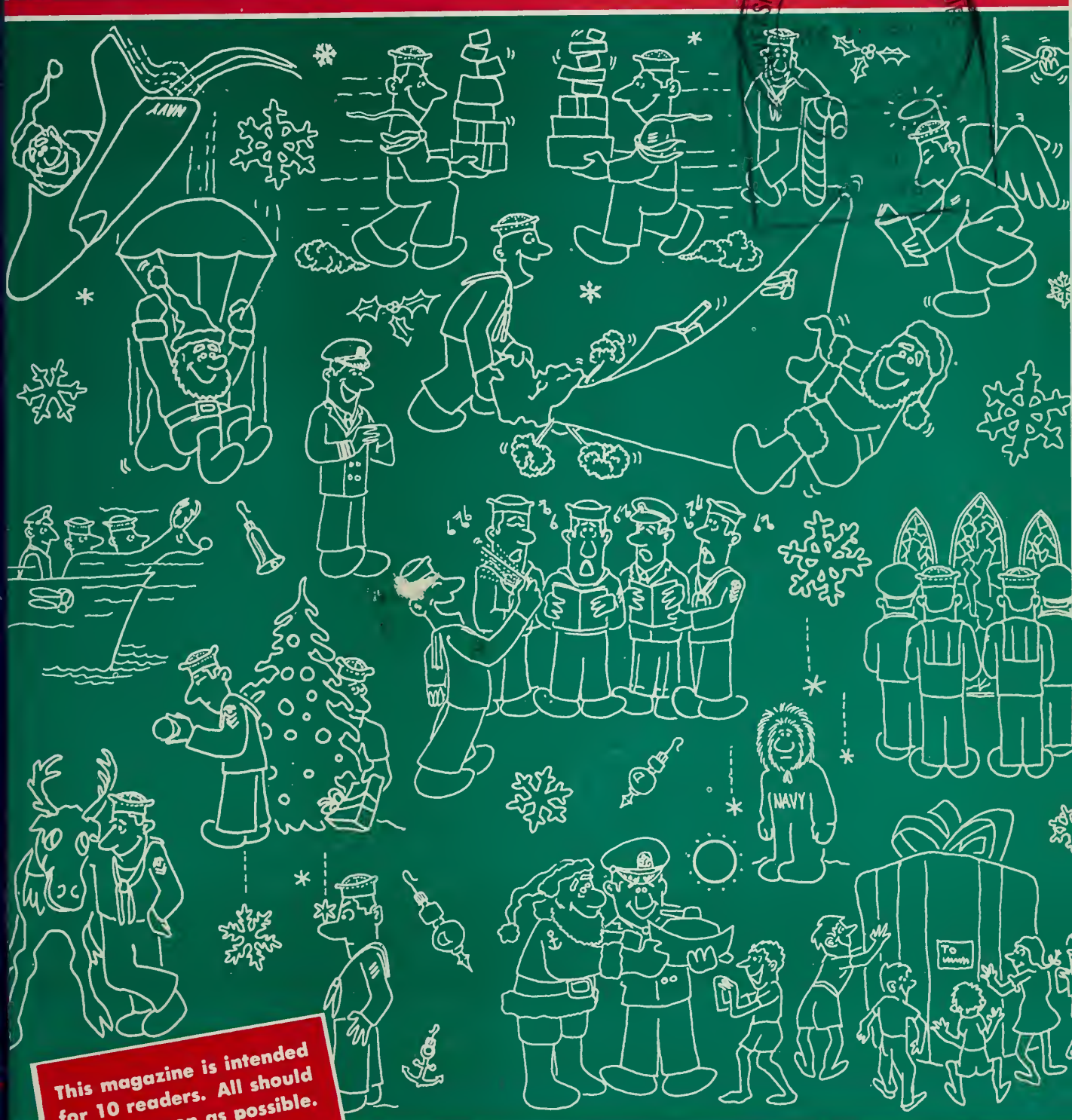
Lord, as I stand on the rolling deck
To view the restless sea
With its wide expanse of darkened sky,
You seem so far from me.
Intrepid youth should feel no fear,
But I have a load of care
For the safety of our ship and men.
Lord, hear my earnest prayer:
That I be true to every task;
May no fault lie with me,
Whatever danger may arise,
As we sail the raging sea.
May I be calm and know that you
Can still the wind and wave,
And be assured in perfect trust
That you have power to save.
When the moon sheds beams from
a starlit sky,
I feel near to you again,
For the same moon shines on my
loved ones, too,
And I thank you, Lord. Amen.

—M. Brown


··· OCEANS OF OPPORTUNITY
··· UNITED STATES NAVY

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



This magazine is intended for 10 readers. All should see it as soon as possible. COPY ALONG

359.05
A416

DECEMBER 1964

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

DECEMBER 1964 Nav-Pers-O NUMBER 575

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The Chief of Novol Personnel

REAR ADMIRAL J. O. COBB, USN
The Deputy Chief of Naval Personnel

CAPTAIN JOHN W. HIGGINS, Jr., USN
Assistont Chief for Morale Services

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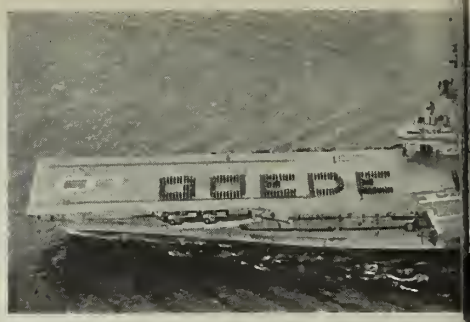
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• **AT LEFT:** FROSTED SHIP—The U.S. Novy's commitments os o protector of peoce ond freedom of the seas coll for continuous duty in the far corners of the earth—from polor regions to the tropics. Here, a Navy ship on operotions in Atlontic sports o covering of ice.

• **CREDIT:** All photographs published in ALL HANDS Magozine ore official Deportment of Defense photos unless otherwise designated.







CHRISTMAS CHEER—Destroyers go all out with light displays. *Rt:* Carriermen spell out Merry Christmas (Top is Dutch).



Around the World

I saw three ships come sailing in
On Christmas Day, on Christmas Day
I saw three ships come sailing in
On Christmas Day in the morning.
—English Christmas Carol

IF YOUR SHIP docsn't come sailing in for this "Christmas Day in the morning," it will mean one significant thing: You will not be home for the holidays. It will also mean nostalgia—especially, perhaps, if you are spending your first Christmas away from home.

Most of us have been in the Navy long enough to know from personal experience that the Navy's operational commitments continue whether or not there's a holiday season at hand. But this still is no cure for nostalgia because, as the saying goes, there's just no place like home for the holidays.

Try as we might, in the environment of a routine day's work aboard ship, chugging along a tedious patrol route over a desolate seascape, it is difficult to recapture the internal warmth and contentment that usually accompany Christmas—call it Christmas spirit or whatever you like.

But by helping to maintain our nation's defense systems, we are performing an important job. In troubled times, whether it's a Sunday or holiday, the free nations cannot be

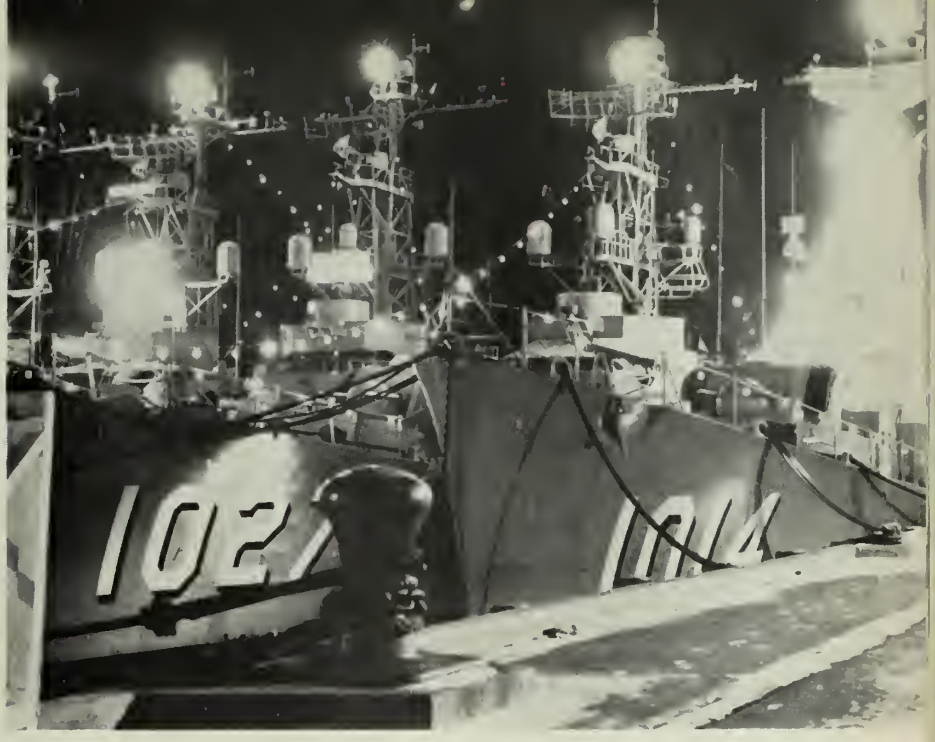
SIGNS OF CHRISTMAS—Cruiserman of *USS Topeka* (CLG 8) sends greetings to relatives. *Below:* Chapel at McMurdo Sound, Antarctica. *Rt:* Whitehats aboard *Maury* (AGS 16) ready gifts and decorations for shipboard orphans' party.











FAMILIAR SIGHT—Around the world Navy ships sport yuletide lights. *Below:* Santa receives a note at NS, Adak, Alaska.

On Christmas Day

caught with their guard down. This year, as in the past, Navy ships and their crews will be witnessing the Yuletide season in many different climates, in many different parts of the world, on the four oceans or "the seven seas."

But as Christmas draws nearer, the old familiar spirit somehow manages to surmount this obstacle of exile. Packages and cards from family and friends arrive by mail, and the spice-sweet aroma of homemade fruit cake and other goodies pervades the area, providing a magic carpet ride back home to mom's side in the kitchen—the nerve center of a successful holiday celebration.

Many Navymen, of course, will not have to rely on this mental image. They will actually be at home to help baste the turkey, trim the tree and make secret missions to the stores for those last-minute shopping sprees. Where possible, leave policy is usually liberalized for Christmas.

FOR THOSE WHO cannot be home, there will be—this year as always—many activities throughout the naval establishment—the type of activities that make Christmas what it is all over the world; and Navymen will be part and parcel of them. As examples, we cite some activities that took place last Christmas:

An eminent visitor brightened Christmas day for Navymen on the dark continent of Antarctica. Francis Cardinal Spellman visited Byrd Station, McMurdo Sound and Amundsen-Scott South Pole Station, offering religious services for Navymen who had volunteered to winter over with Operation Deepfreeze.

From these small recreation halls and laboratories at isolated outposts on the bottom of the world to Navy vessels whose location could be pinpointed only by degrees of latitude and longitude, chaplains of all denominations were transiting by heli-



HAPPY TIMES—Children from Yokohoma home receive toys from nearby unit.





NOW HEAR THIS—The Bluejacket Choir at NTC, Great Lakes, sings out Christmas songs at base of tree on Ross Field.

copter, cargo plane or highline to lead worship services on the holy day.

Through the combined efforts of the Japanese Air Self-Defense Force and U. S. Navymen at Kisarazu, Japan, 160 local orphans, aged 2 to 14, enjoyed a Merry Christmas at the auxiliary landing field there. They were taxied around Kisarazu's runways in transport planes and shown around the base. After a lunch of hamburgers, baked beans, french fries and chocolate milk, they moved to the station gym for a magic show, songs by children from local schools, a ballet performance and entertainment by a drum and flute drill team. Santa flew in and passed out gifts; then the kids topped the day off with ice cream and cake.

In another part of Japan, USS *Graffias* (AF 29) sponsored a party for 88 Japanese children from a Sasebo orphanage. The kids toured the ship, had turkey dinner, saw movie cartoons, then received gifts from Santa.

SANTA landed his sleigh aboard USS *Independence* (CVA 62) in the Med to deliver about 1400 lbs. of Christmas mail—perhaps the best present he could bring to the shipboard sailors. VR-24 helps Santa with this annual Christmastime practice by providing a plane that is decorated to resemble a sleigh.

Independence, in turn, entertained children from orphanages and homes in Cannes, France. There was dinner, a party, a puppet show, a Christmas pageant and gifts galore. Sailors went ashore for four days to do fix-up work on the orphanages.

The USO in Nice, France, presented 15 free phone calls home to happy bluejackets whose names were drawn from ticket stubs. Also, six sailors answered invitations to a royal dinner with Prince Rainier and Princess Grace of Monaco.

Sailors in the south of France area were invited into French homes for the holiday.

Orphans in Charleston, S. C., were remembered last Christmas by the crew of USS *Everglades* (AD 24). A party, which included a buffet, was held on board for 28 local children, after which gifts for the orphanage bought by donations from the crew, were presented. They included kitchen utensils, bedding and linens, some much-needed winter clothing for the youngsters, and a stereo record player.

At Sanford, Fla., 40 children from families which might otherwise have been denied a Christmas celebration, were treated to gifts and a party at NAS Sanford. There were the usual songs, skits, ice cream, cake and presents, after which St. Nick presented the complete makings for a Christmas dinner to each family.

THESE ARE ONLY a few of the multitude of ways that Christmas is celebrated around the world by Navymen who cannot be home with their own families.

By expressing the friendship and kinship for people the world over that Christmas traditionally creates, Navymen in the distant corners of the globe are helping to portray the true intentions of the United States in its pursuit of Peace on Earth, Good Will Toward Men.

At the same time, two of Kipling's lines are especially poignant:

"High noon behind the tamarisks —the sun is hot above us/As at home the Christmas Day is breaking wan . . ." —Bill Howard, JO1, USN

SHIP AND SHORE—Pacific carrier men attend services in hangar bay chapel. *Rt:* Spanish orphans get Christmas treat.









TWO SEA CADETS practice code with *Coral Sea* flashing light. *Right:* Cadets run through telephone talking drill.

Sea Cadet Corps

SIXTEEN SEA CADETS hoisted their seabags on their shoulders and walked up the gangway to USS *Coral Sea* (CVA 43) to spend eight days in training at sea off the northern California coast.

The cruise enabled the Cadets, from the USS *Hancock* Squadron, to complete practical factors for rating advancement and get a firsthand look at a carrier. Tours of the ship familiarized them with *Coral Sea's* armament, damage control facilities, boiler rooms and bridge.

During the first three days the cadets attended sessions on first aid, the sound-powered telephone nomenclature, firefighting, marlinspike seamanship and other basic shipboard subjects. After the lectures they worked in the Deck Division.

Sea Cadet Corps units began forming in the United States in 1958, as a joint effort of the Navy and Navy League to prepare boys for military service. Today there are over 80 active units.

Boys from 12 to 14 may train in basic seamanship for two years, then join the U. S. Naval Sea Cadet Corps. In the Corps they are given the same mental and physical examinations as their regular Navy counterparts and pursue the same basic curriculum as new Navy recruits.

As long as a cadet remains active in the program he can advance in rating the same as a regular Navyman, and can go into the regular Navy holding the rating he achieves through the program.



FOR THE RECORD—Sea Cadet receives certificate from *Coral Sea* commanding officer as carrier ends training period and eight-day cruise.

NOZZLE MAN demonstrates knowledge gained in firefighting classes for Cadet Corps officer. *Rt:* Boys spend off-duty time playing chess in recreation area.









ON THE MED—*Roosevelt* crew members look at birds in Barcelona. *Rt:* Carriermen enjoy cafe while touring Capri.



A Merry Leave in

A LONG WEEK-END in the Swiss Alps, watching a bullfight in Barcelona, a tour through the basilica of St. Peter in Vatican City, a snapshot spree at the Parthenon in Athens, or eyeing the beauties on the beaches of Cannes – these are some of the activities Sixth Fleet sailors engage in while on liberty in the Mediterranean.

At one time ancient scholars considered the Mediterranean the center of the world. Today, with its history, friendly people, colorful customs, and sub-tropical climate, it is indeed a world tourist center. White hats are a common sight as they bob among the throngs of sightseers.

Each port has its outdoor cafes, street vendors, ancient cathedrals, horse-drawn carriages, etc., but each country will have all these things in a fashion that is as different from the others as is the language.

Beyond the port cities, Sixth Fleet Navymen may also tour other parts of Europe. These tours, set up through the ships, make trips to places like Paris, Rome and Munich available to the crew at low cost.

PLEASURE BOUND—Men of *Franklin D. Roosevelt* (CVA 42) board liberty boat.

IN PORT—Carriermen draw crowd with guitars on Riviera. *Below:* Historic landmarks of Rome are visited.







IN CAPRI Navymen relax at cafe.

the Med

While the men of the Sixth Fleet are seeing the sights ashore the people in turn, see the Sixth Fleet by visiting the ships in port. The attack carrier USS *Franklin D. Roosevelt* (CVA 42) has acted as host to over 20,000 visitors in five months.

At sea the men of the Sixth Fleet work long and hard hours as members of an international team dedicated to freedom of the seas but, when the Fleet anchors, there is always a long line waiting for the first liberty boat.

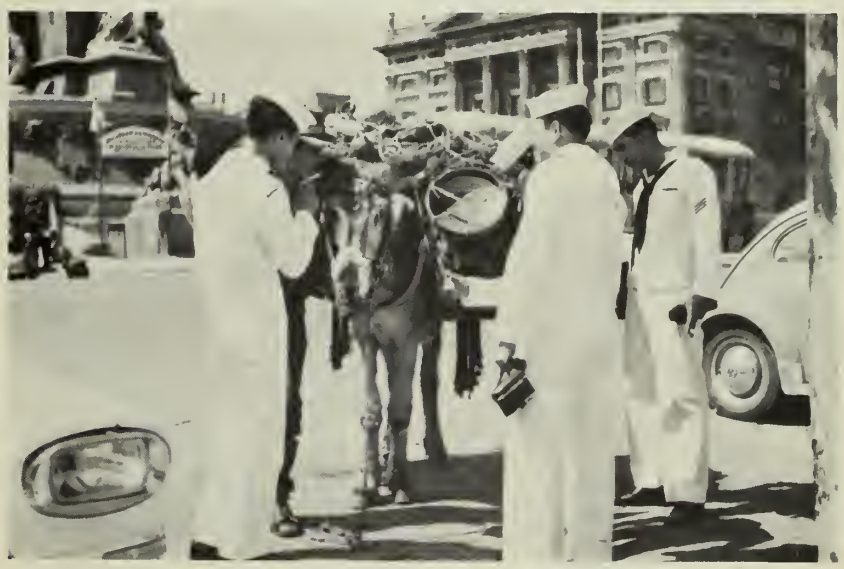
—Thomas D. Talley, JOSN, USN



FOR HOME—Post cards are scanned.



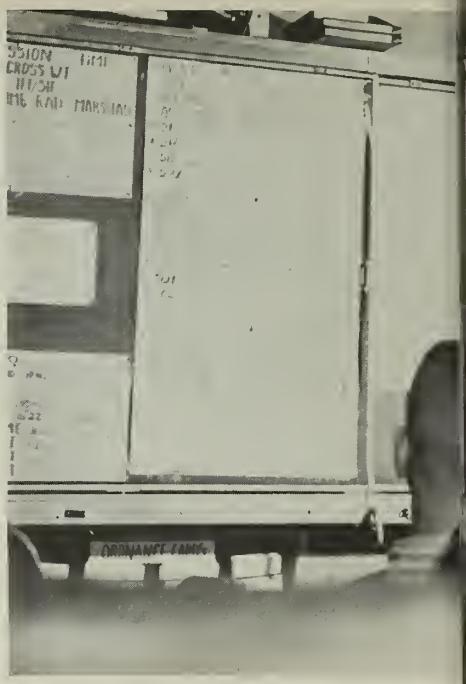
ON FILM—Carriermen put their cameras in action to capture scenes on the Island of Mallorca. *Below:* Souvenirs are appraised while in port in Spain.



SMALL HAMS—Young boys of Malta grin as *Roosevelt* sailor mans his camera.







PILOTS LISTEN intently to briefing *(left)* as plans are mapped out *(right)*. *Below:* Last-minute check of aircraft.



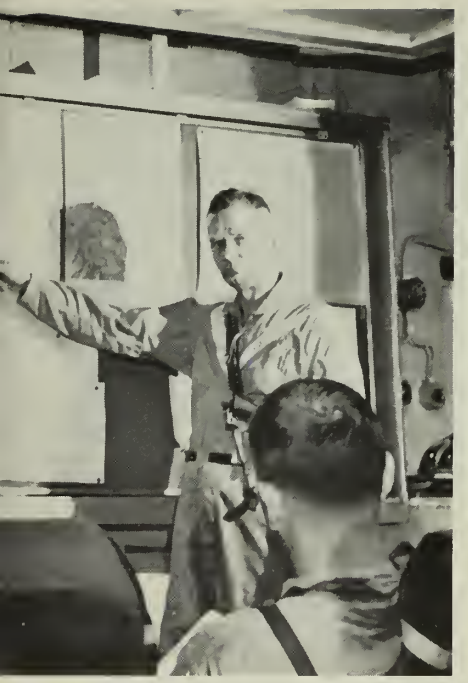
TONKIN:

Routine shipboard drills have their share of monotony. But there was plenty of excitement not so long ago when the men of USS Constellation *(CVA 64) were assembled for "just another drill." This was the real thing. Planes were being dispatched to meet the threat of Viet Cong units which had fired upon U. S. Navy ships—the first time any American ship had been attacked by hostile forces in more than a decade.*

Those drills paid off. Here is an

USS Constellation steams at sea.







READY TO GO—Pilot boards his plane after making certain plane and equipment are ready for flight over Vietnam.

A FOOTNOTE TO HISTORY

on-the-scene report of that incident in August which is now part of history.

IT HAD BEEN a quiet and peaceful day for the men of the giant attack aircraft carrier USS *Constellation* (CVA 64).

The ship had departed the exotic port of Hong Kong the day before and many of the men were reliving their experiences as the ship headed for the South China Sea to resume operations with other units of the U. S. Seventh Fleet. The giant ship was slicing her way through the blue water, launching her aircraft into the afternoon quietness when, suddenly, the peace was shattered.

"General Quarters!" The alarm immediately called 4200 men to their battle stations.

Brief moments later, the voice of Captain Frederic A. Bardshar, Commanding Officer of *Constellation* was heard over the ship's public address system. He gave his men a brief summary of the events taking place in Southeast Asia in the past 24 hours. North Vietnamese surface vessels had attacked two U. S. destroyers, USS *Maddox* (DD 731) and *Turner Joy* (DD 951) operating on routine patrol duty in international waters in the Gulf of Tonkin.

The captain also explained to his crew that, in retaliation for this unprovoked aggression on the high seas, aircraft launched from *Constellation's* flight deck were now on their way to join with aircraft from the carrier *Ticonderoga* (CVA 14)

FLIGHT DECK officer gives high sign as A4C *Skyhawk* is catapulted from carrier's deck en route to Vietnam mission.







THUMBS UP—Pilot and his director exchange traditional "thumbs up" signal signifying that the plane has been checked and all systems are flight ready.

in strikes against patrol boat bases and supporting facilities in North Vietnam.

Constellation, in company with USS *Fechteler* (DD 870) and *Gridley* (DLG 21), units of Rear Admiral W. S. Guest's Carrier Division Nine, were now the offensive spearhead for one of the U. S. Seventh Fleet's high speed task forces.

ACTIVITIES on the flight deck had slowed for the moment. The screaming jets and propeller driven aircraft, laden with rockets and hundreds of rounds of ammunition, were now racing to their targets.

Maps of the target areas were still pinned to the walls in the many briefing rooms about the ship.

CONNIE'S PARTNER—Jets from USS *Ticonderoga* (CVA 14) streak to join those of *Constellation* in raid.



Squadron personnel stood by, impatiently awaiting the first word from their pilots. The aircraft recovery crews were on alert on the flight deck.

For some of the older men, this was not entirely new. They had gone through similar experiences years before, during World War II, and more recently, in Korea.

But, for the younger men, this was the first taste of action. This was the "real thing." This was what they had been trained for, all the while hoping it would never come.

The aircraft they had worked on for so long, checking and rechecking, were now making actual attacks on real targets with live ammunition. And they were facing heavy anti-aircraft gunfire.

A young plane captain, hardly old enough to cast his first vote, stands on the flight deck. He is remembering the traditional exchange of the 'thumbs up' signal with his pilot as they both completed last minute checks before the plane taxied into position on one of *Constellation's* four steam catapults.

THEN THERE IS no time for remembering. The word has been passed, "Stand by to recover aircraft."

Suddenly, the flight deck is dotted with brightly colored shirts as recovery crews scurry about, clearing the huge four-acre seagoing airstrip for the first returning aircraft.

As the roar of the returning jets increases, each plane number is called by the Flight Deck Officer, to alert the different crews to stand by for recovery of their aircraft.

Like clockwork, with a mighty roar the planes touch down and are caught on the arresting cable. As quickly as one plane is safe on the deck, it is whisked out of the runway area, and another touches down. One plane is slightly damaged.

Even from this distance you can see the tense, strained look on the pilots' faces. Two recovery crews are still standing by, their eyes anxiously scanning the skies for some sign. Their aircraft have not returned.

Then, all too soon, it is evident that two of *Constellation's* aircraft will not be returning.

Two pilots are missing in action. One of them was later reported as captured.

THE STRIKE had been a success. All designated targets had been destroyed or severely damaged.

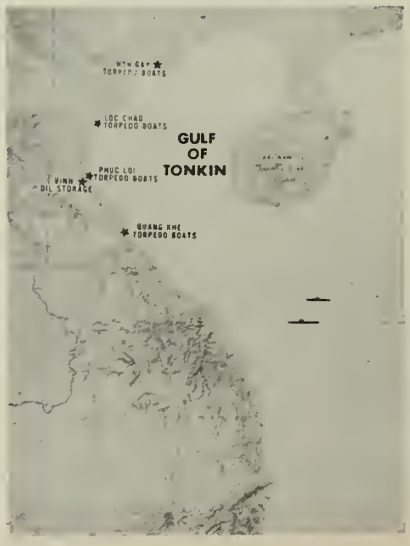
An oil storage depot, representing 10 per cent of North Vietnam's petroleum storage capacity, was 90 per cent destroyed.

Approximately 25 patrol boats were damaged or destroyed. A report of the mission had been written and is now being reviewed. The crews of the missing aircraft will be assigned to other planes.

The strike is completed, but the job is still undone—the job of maintaining peace in Southeast Asia, keeping the world's sea lanes open, checking aggression in Vietnam.

This is evident as the many aircraft aboard *Constellation* are checked, re-checked, refueled, rearmed and made ready.

POSITION OF carriers is shown at time of air strikes on Vietnamese bases and supporting facilities.







Talos Takes a Trip

UNDERWAY replenishment of naval forces is a relatively young art, when one remembers that navies have sailed the seas for well over two thousand years.

In fact, underway replenishment was first seriously attempted just before World War II. During the war, it became a reality and accounted to a large extent for increased mobility of our fleets.

The transfer of missiles has provided a real test of the principles of at-sea replenishment. These missiles are not only large and heavy, but also delicate, for they contain many electronics packages. This makes life complicated for the ships involved.

A contribution toward the development of rapid missile replenishment was made earlier this year during Sixth Fleet exercises. A live missile transfer at sea was completed from USS *Diamond Head* (AE 19) to USS *Albany* (CG 10).

Because of their size, the missiles and booster packages are transferred separately, then remated on board the receiving ship.

Evaluation of the problems encountered during transfers of this type will aid the development of faster handling equipment.



Clockwise, from upper left: (1) USS *Diamond Head* (AE 19). (2) The live *Talos* missile moves between ships on carefully tended lines. (3) USS *Albany* crew prepares missile for stowage. (4) USS *Albany* (CG 10).



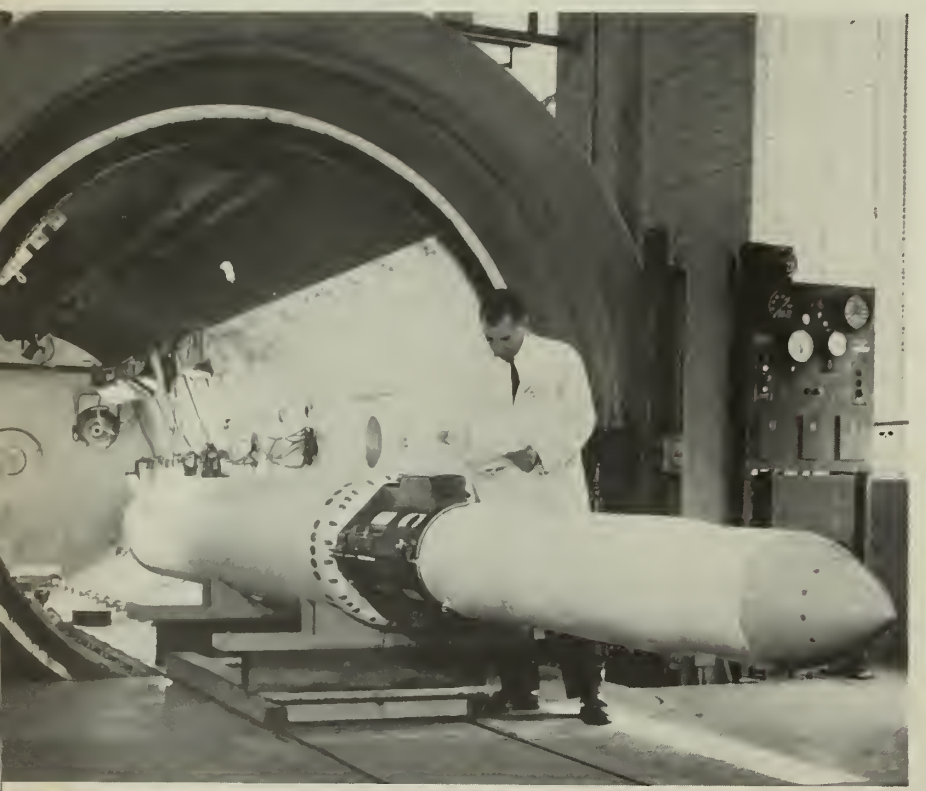




Subroc: Rocket, Bomb,

LATE LAST YEAR the Navy passed a major milestone in the testing program for its antisubmarine weapon *Subroc*. An underwater-launched missile capable of destroying enemy submarines at long range, *Subroc* is an important new member of the Navy's arsenal. It points up, once again, the role of nucleonics and electronics in the space age world, and it is one more indication that in this we must deal not only with outer space but with inner space as well. Here is the story of the development of *Subroc*, based upon information from the U.S. Naval Ordnance Laboratory, where it was born.

UNDERWATER pressure tests were conducted at Naval Ordnance Laboratory.



The basic plan for an underwater-launched antisubmarine weapon that would take to the air and be effective at long range was conceived at NOL, White Oak, Md., in the mid-1950s. Follow-up studies established the feasibility of the concept which, in turn, led to the establishment of a development project and the selection of a prime contractor in 1958.

Five years after, in late 1963, *Subroc* passed its last big hurdle—actual flights from a moving submarine in the Pacific Ocean. At this time the missile was fired from varying depths and over varying distances—up to its classified maximum range.

In today's changing world, an antisubmarine weapon is a vitally important weapon. Enemy submarines represent a challenge to the free world's use of shipping lanes. Furthermore, missile-firing submarines, in the hands of an unfriendly power, would mean that protection of our coastal cities would assume an even higher priority than before.

The development of weapons systems aimed specifically at combating this menace has been going on for some time, and *Subroc* is a major fruit of this extensive research.





Missile

With the unveiling of *Subroc* came the news that the United States is building approximately 25 fast, nuclear attack-type submarines "capable of seeking out hostile submarines and destroying them with *Subroc* missiles."

UNLIKE *Polaris*, *Subroc* is designed to be launched horizontally from standard submarine torpedo tubes, using conventional ejection methods. Once *Subroc* is a safe distance from the submarine, a solid fuel rocket motor ignites underwater and propels the missile upward and out of the water.

A lightweight inertial guidance system directs the missile on a determined course by means of a thrust vectoring system on the rocket motor. At an appropriate velocity, separation of the rocket motor from the depth bomb containing the nuclear warhead is accomplished by a thrust-reversal and mechanical disconnect system.

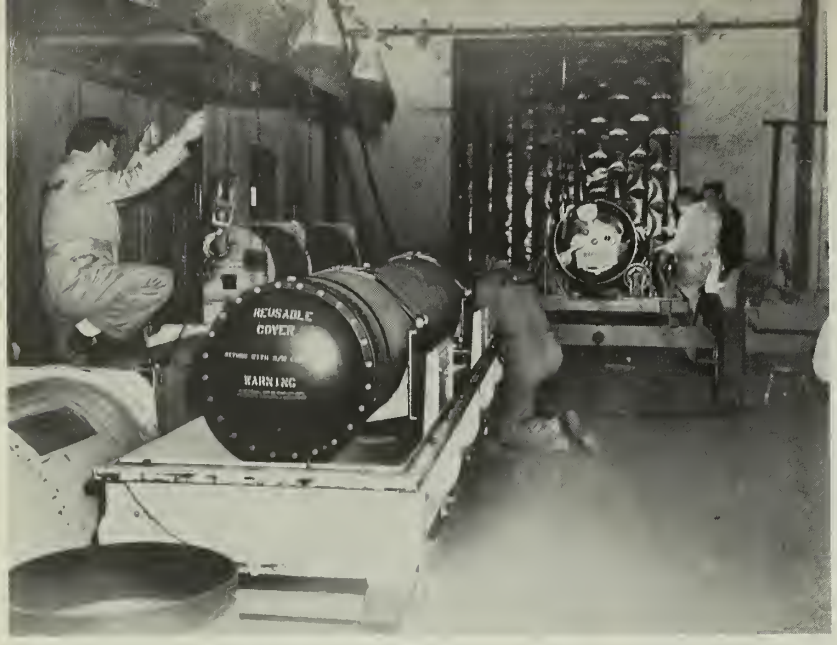
After separation, the slender depth bomb continues on its trajectory under control of its guidance system, which now steers the projectile to the target area by means of aerodynamic fins.

Upon supersonic re-entry into the water, a "mitigating device" cushions the shock. The depth bomb then sinks and its nuclear warhead explodes, destroying the enemy sub.

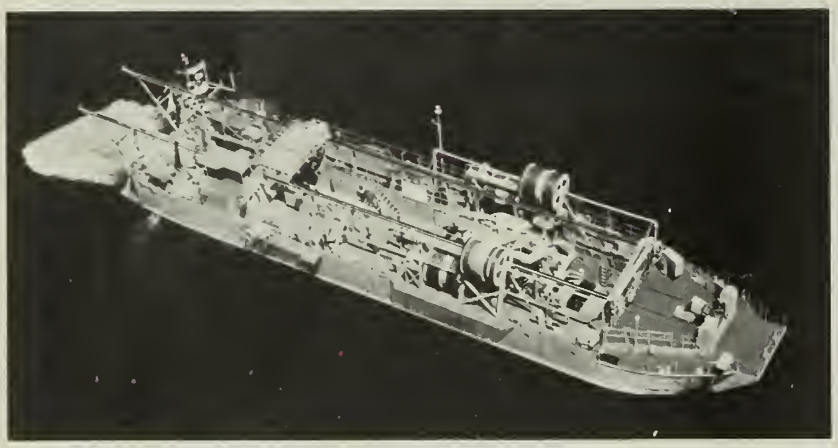


UP AND AWAY—Firing of *Subroc* is shown in photo sequence. *(1) Subroc* travels a safe distance from ship before rocket motor ignites. *(2)* Rocket leaves water and builds up to supersonic speed. *(3)* Rocket soars skyward. *(4 and 5)* Rocket motor separates as guidance system takes over *(6)* to direct it to target.

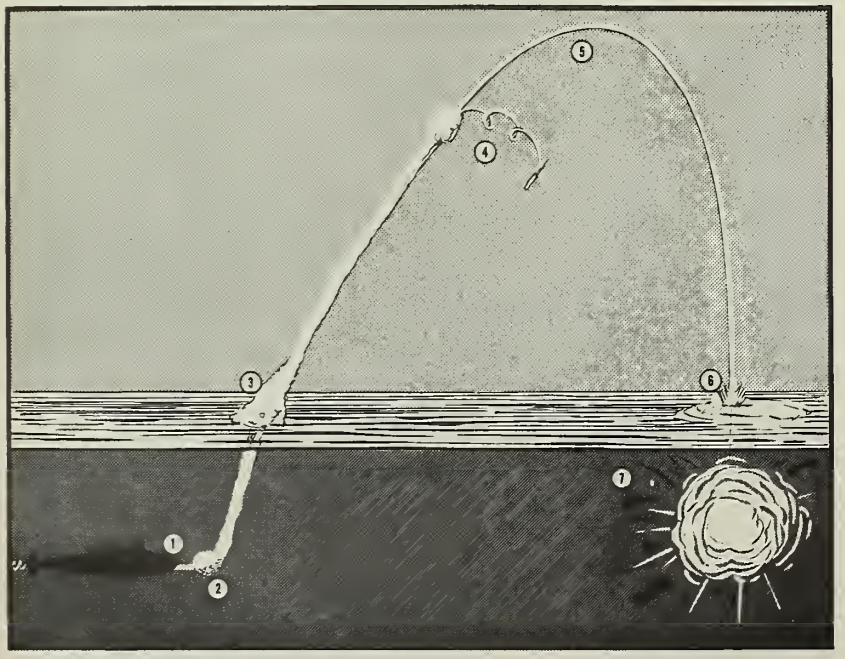




TO FLEET—*Subroc* motors are completed and packed in shipping containers.



SPECIAL ASSIGNMENT—Modified LCU was used in testing program at San Clemente Island. *Below:* Diagram shows the stages in *Subroc's* route to target.



Subroc is unique in several respects.

- It must operate in two environments—water and air.
- It is the first underwater-launched ASW weapon capable of exceeding the speed of sound, . . . it is the first missile to light off a rocket engine underwater.
- It employs new, highly developed techniques in guidance and motor design.
- It employs the first submarine-borne fire control system to include a digital computer for target motion analysis. (This system in its most flexible form can solve many problems simultaneously.)
- It is designed so that once it is on its way, *Subroc's* speed places it on target before the enemy can take significant evasion action. The weapon system uses sonars which are able to detect targets at great distances and it can fire missiles in rapid succession, an important defense against "wolf-pack" tactics.

AS AN ANTISUBMARINE weapon, *Subroc* was an outgrowth of work carried out at the Naval Ordnance Laboratory on the *Astor* and *Asroc* weapon systems.

The need was for a missile system which could employ the full potential of the Navy's new attack class nuclear submarines as launching platforms, and which could kill enemy submarines at far greater distances than any existing submarine-launched weapons. NOL first had to conceive and then prove the feasibility of the *Subroc* system.

During the feasibility program scientists and engineers at NOL made use of the facilities and talents of other activities of the naval establishment, such as the Naval Ordnance Test Station, China Lake, and the Naval Propellant Plant, Indian Head, Md., as well as those at the NOL.

The *Subroc* development which followed has also been a joint effort, using the facilities and talents of the Navy and the nation's industrial team, under the technical direction of the Naval Ordnance Laboratory. The naval activities participated actively in the design and development of the hardware items. By the same token, the civilian industrial team participated in the Navy's test and evaluation of these items.

Navy scientists put to use all of NOL's facilities to solve the wide range of technical problems pre-





TEST TIME—*Subroc* gets electro-magnetic vibration test and *(rt.)* is loaded aboard plane for air drop test.

sented by the program. These facilities include ballistic ranges, wind tunnel facilities, water impact ranges, plastics and X-ray laboratories and environmental evaluation facilities.

The *Subroc* system is the NOL's largest single project. It has required the full-time skills of more than 200 scientists, administrators, engineers and technicians.

HERE IS A rundown on the *Subroc* missile system. In a nutshell, it is a "submarine-launched, rocket-propelled, inertially-guided, nuclear depth bomb for long-range destruction of hostile submarines."

From the outset, *Subroc* posed a knotty problem.

First, the size of the missile was limited in length and diameter to the size of a submarine torpedo tube. Second, the rocket motor had to ignite under water and propel the missile out of the water and into the atmosphere.

Because of its water-to-air-to-water operational cycle, *Subroc* designers had to build in the hydrodynamic qualities of a torpedo and the aerodynamic characteristics of a missile. They also had to develop a shock-mitigating device to protect the arming device and warhead when the missile re-enters the water at supersonic speed.

A thrust-vectoring system employing four "jetavator" type nozzles was developed, enabling the missile to change course under water to guide its angle of emergence from the water and to control stability during the rocket burning sequence.

Separation of the rocket motor from its nuclear depth bomb is accomplished through a combination of thrust reversal system and explosive bolts, which permits the warhead to continue on its trajectory and sends the spent motor tumbling to the sea.

Once separation occurs, fins on the depth bomb control pitch, yaw and roll to steer the missile to the target and control the angle of water re-entry.

Upon water re-entry, a shock-mitigating device cushions the impact and the depth bomb sinks and explodes.

SUBROC is designed for use on the Navy's attack class, deep-diving nuclear submarines. With a length of 279 feet and displacing 3750 tons, these submarines also carry long-range homing and wire-guided torpedoes.

The *Subroc* fire control system provides accurate and rapid analysis of the raw target detection data fed into it. The system will keep either

SUBROC SHOOTER—Full-scale test firings made from *USS Permit* (SSN 594).





'GROUND' WORK—San Clemente Island Range of NOTS Pasadena was site of first full-scale launching of Subroc.

Subroc or conventional torpedoes continuously supplied with firing data.

The fire control system:

- Receives sonar, radar or optical information data in addition to "own ship" information.
- Generates target position and motion and "own ship" position data.
- Solves ballistic problems to provide weapon orders for the *Subroc* missile and solves vector problems to provide initial firing and subsequent control orders for homing and/or wire-guided torpedoes.
- Continuously presents an instanteous and clear visual display of the tactical situation to the fire control party, both before and after firing.

AN IMPROVED, high performance sonar system capable of detecting an enemy at long range is the backbone of the detection equipment used with the *Subroc* system.

The first full scale *Subroc* missile tests were carried out at NOTS China Lake. These included land-based flight, and rocket powered runs on the Supersonic Naval Ordnance Research Track (SNORT). These tests provided information on launch characteristics, control system performance, guidance, and flight conditions of the new missile.

The San Clemente Island Range of NOTS Pasadena was the site of the first full scale underwater-launched flights. These were made from an instrumented launcher system which could be lowered from a modified LCU to various ocean depths.

After these flights from the launcher, the developmental test program culminated in the successful firing of missiles from a nuclear attack-type submarine. This marked a major milestone in bringing *Subroc* from concept to operational weapon.

You'll hear more about it in future issues of ALL HANDS.

The Subroc Story—Vital Statistics in a Capsule

- *Mission*—Antisubmarine missile, underwater-to-air-to-underwater.
- *Description*—Submarine-launched, rocket-propelled, inertially-guided nuclear depth bomb for destruction of hostile underwater craft.
- *Range*—Greater than any other ASW weapon except aircraft.
- *Propellant*—Solid fuel.
- *Warhead*—Nuclear.
- *Weight*—Approximately 4000 pounds.
- *Launch Technique*—Launched horizontally from standard submarine torpedo tubes, using conventional launch methods. Submarine can be moving, need not be pointed at target.
- *Method of Operation*—Once clear of submarine, rocket motor ignites under water and propels missile up and out of water. Missile is steered during powered flight by jetavators which deflect the burning gases in accordance with signals from the guidance system. At a predetermined velocity, a thrust reversal technique separates the depth bomb from the rocket motor. The depth bomb continues toward its target, guided by aerodynamic fins controlled by the inertial guidance system. Upon reentry into the water, the bomb sinks and detonates.
- *Fire Control*—Highly accurate, rapid, digitized system. Designed on the building block principle, making possible modifications of varying complexity to suit needs of specific submarines. System can handle other submarine-launched weapons in addition to *Subroc*. This is a milestone in missile accomplishments.
- *Advantages*—Can be carried dormant in torpedo tubes for long periods and can be launched with a minimum of make-ready time.

High speed places it on target before enemy can take significant evasive action.

Uses a sonar system which can detect submarines at great distances and can fire missiles in rapid succession. Can attack in areas inaccessible to surface ships and aircraft.

Has maximum safety features, does not require special launching tubes, increases submarine attack capability without sacrificing existing weapons or space on board.

Minimum of special handling equipment required.

- *Management Director*—Bureau of Naval Weapons.
- *System and Technical Direction*—Naval Ordnance Laboratory, White Oak, Silver Spring, Md.





NRS VOUNTEER logs in patients at Naval Hospital. *Rt:* Navymen in financial trouble get prompt assistance at NRS.

Aid for All Hands

WHETHER it's a case of money for travel on an emergency leave, a layette for an expected baby, a college scholarship or an educational loan for one of his children, every man in the Navy and the Marine Corps can turn to the Navy Relief Society.

It has been the constant concern of the Society that many a Marine or Navyman, when faced with a financial crisis, will put himself in hock to a loan shark simply because he didn't know the Society is willing to lend or give him the needed money.

The activities of the Navy Relief Society in the Ninth Naval District (which includes the Great Lakes Naval Station and 13 states besides) is a good example of what the Society does for Navymen and their dependents.

The Great Lakes unit, which is one of the busiest agencies in the world-wide Navy Relief organization, last year gave more than $14,000 in grants to 208 Navy and Marine Corps men and their dependents.

These were gifts to men who were laboring under such severe hardships that paying back even an interest-free loan would have meant near financial disaster.

In addition to the no-obligation grants, the Society in the Ninth Naval District loaned more than $41,000 to 615 Navy and Marine Corps men and their families. These loans were to be repaid without interest, at the borrowers' convenience.

Here are a few specifics on how and to whom this money went:

• A petty officer at Great Lakes needed money for a quick humanitarian transfer to enroll his two children in a special school for the deaf. The Society came through with $345 travel money—at no charge.

• The 13-year-old son of a deceased Navy chief was severely burned in an explosion which resulted in eye surgery and skin grafting for the boy. The Navy Relief paid his $750 hospital bill and $25 ambulance fee.

• A Navyman's household goods, including most of his family's furniture and clothing, were damaged in a train wreck. It would take months before he would be reimbursed for his loss. The Society had the furniture repaired; the clothing cleaned; and picked up the tab.

• A retired Navy veteran living in an isolated area was rushed to a non-government hospital when he became suddenly ill. He died leaving his widow a $742.00 medical bill. The Great Lakes auxiliary wrote her a check for the full amount.

There are only a few of the things done by one unit of the Navy Relief Society. Similar things happen in all the other society auxiliaries throughout the world.

This is not to mention the Thrift Shops where clothing, furniture and household items can be purchased at nominal prices. Or the hundreds of layettes made and given each year. Or the hospital children's waiting rooms. Or the house calls made by Navy Relief nurses.

All this, of course, costs money and Navy and Marine Corps people contribute a large part of it. Civilian friends of the Navy add more. In the case of the Navy Relief Society, Navymen have the satisfying knowledge that everything they contribute to the Society goes back in actual aid. The administrative expenses of the Society are paid from income earned by NRS investments.







OLYMPIC SILVER MEDAL winner LTJG Frank Gorman explains diving to Japanese girls. *Rt:* Gorman and diving coach.



Year-End Roundup or

Navymen around the world have been busy in the field of sports. Here is a year-end round-up of how they fared in the 18th Olympic Games, All-Navy Softball tournament, National Rifle Association championships, and All-Navy Golf matches.

Navy in the Olympics

SIX NAVYMEN went to Tokyo as members of U.S. Olympic teams this year in five sports—baseball, boxing, diving, fencing and rowing. Among them were several current All-Navy Champs and Pan-American Games winners.

In addition, five men were picked for berths as alternates or team members, but did not make the trip to Japan.

NAVY oarsmen ENS Edward P. Ferry, III, (above), and ENS William A. Stowe won gold medals. James Rosette, AN, boxed in middleweight class.





- **Baseball**—B.G. Dollar, CS3, was "discovered" in a tournament in Hawaii. A representative of the U. S. Amateur Baseball Team saw Dollar playing for *ComSubPac,* liked him and asked him to play for the American team.

Baseball, which is not a part of the actual games, was to be played as one of the Olympic exhibition sports.

- **Boxing**—James Rosette, AN, was selected as the regular team's 165½-lb. representative as a result of his win in the trials. Rosette boxed in the 1960 Olympic trials and has been an All-Navy titleholder since 1959.

Another All-Navy champ, Richard Pettigrew, YN2, was an alternate on the squad in the heavyweight division. He has been an All-Navy champ since 1962, the year he also won the Inter-Service crown and was second in CISM boxing.

Bobby Valdez, SN, became an alternate on the boxing team with a second-place finish in the New York trials. He is the current All-Navy 132½-lb champion.

- **Diving**—Navy Lieutenant (JG) Frank Gorman literally gained his Olympic berth head first as he won the three-meter diving championship at the trials. It was the first major win for the former Harvard man, despite his impressive record—he was





SOLE NAVY MAN on U. S. Olympic fencing team was LT Al Morales. *Rt:* U. S. Olympic team passes in review.

Navy Sports Here and Abroad

named to the NCAA All-American swimming team three times while in college, and has been runner-up in both NCAA and AAU national contests.

• **Fencing**—The Navy's own "three musketeers"—LTJG Al Morales, LTJG Joseph Paletta, Jr., and LT Roland Wommack—gained a regular and two alternate spots, respectively, on the U. S. fencing team.

Morales was the number two man on the team this year. Among his past feats have been the NCAA saber crown in 1959 and membership on the 1959 and 1963 U. S. teams in the Pan-American Games.

An all-around athlete, Morales also performs in the modern pentathlon event, which includes riding, fencing, pistol shooting, swimming and cross-country running.

Paletta was selected as an alternate in foil competition. He is a former NCAA and NAAU foil champion, and was a member of the 1959 Pan-Am team.

Wommack was given an alternate spot on the epee team. His past record includes the 1958 and 1959 NCAA epee championship and the Pan-Amercian Games' individual epee title in 1959.

All three of the swordsmen had also been members of the 1960 Olympic team.

• **Rowing**—No Olympic team would be complete without Navymen in the rowing events, and this year was no exception. Two bluejackets were chosen to go west as part of the U. S. rowing squad.

ENS Edward P. Ferry, III, was picked as a regular in the pairs rowing with coxswain, as a result of his win in the event at the trials. Ferry won a gold medal in that event in the 1963 Pan-American Games.

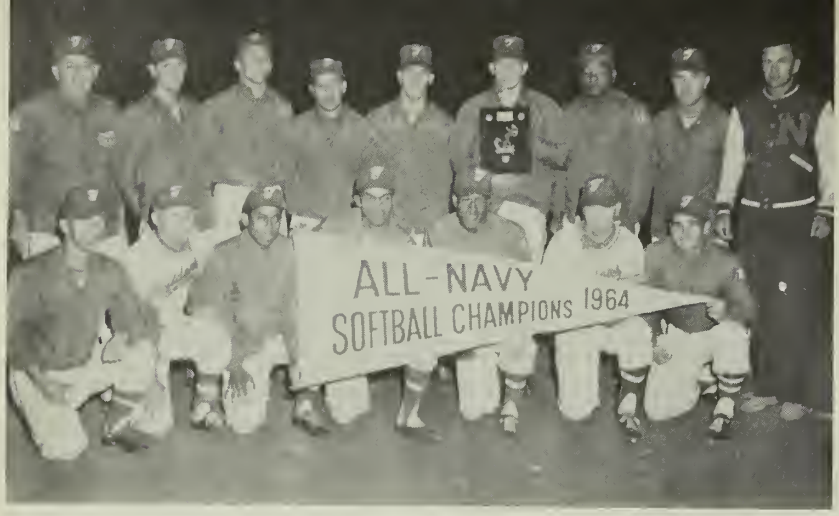
ENS William A. Stowe was a member of the Vesper Boat Club's winning eight-oar shell team.

• **Water polo**—LTJG Charles G. Bittick, who played with the Inland-Nupike team in the trials, was given a berth on the water polo team, but didn't make the trip.

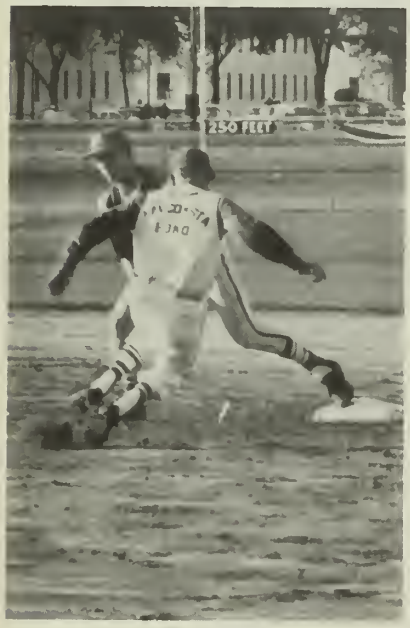
A veteran of the 1960 Olympiad,

VESPER BOAT CLUB'S eight-oar shell team practices in Tokyo. ENS Bill Stowe (second from right) helped in victory.





ALL-NAVY SOFTBALL champions from *USS Sperry* show off pennant and plaque. *Below:* Close play at second during tournament.



Bittick has been an All-American water polo player since 1960. He also went to the Pan-American Games with the U. S. team in 1959 and 1963.

In addition to his prowess with the wet brown ball, Bittisk excels as a backstroke swimmer. A silver medal winner in the 1963 Pan-Am 200-meter event, he has also held four American backstroke records.

Olympic Medals

Ensigns Edward P. Ferry, III, and William A. Stowe won two gold medals as members of United States Olympic champion teams. A silver medal was also awarded to LTJG Frank Gorman in diving competition.

Ferry and his shell-mates edged out the French team by less than two seconds over the 2000-meter course in pairs with coxswain competition.

MARKSMAN—Senior Chief Morine won National Service Rifle Championship



Stowe won a gold medal for his part in the eight-oar shell event, rowing with the Vesper Boat Club oarsmen. The team was beaten by Germany in the first elimination heat, but qualified for the finals by ousting Japan and Korea in the repechage, or second-chance heat.

The Vesper team won the final by 5.06 seconds, upsetting the favored Germans.

The third Navy Olympic winner, LTJG Gorman, won a silver medal as part of a 1-2-3 American sweep in the men's springboard diving final. Gorman led all competition through seven of the ten dives, then lost to Ken Sitzberger on the final day by little more than two points.

The Marines contributed two medals to the U. S. tally at the Olympiad. First Lieutenant Billy Mills upset the field in the 10,000-meter run to win a gold medal, set an Olympic record, and claim the first victory ever for the U. S. in that event. Sergeant Charlie Brown won a bronze medal for his performance as a featherweight boxer.

All-Navy Softball

A STRONG *USS Sperry* (AS 12) team walked off with all the honors at the All-Navy Softball Championships at Great Lakes—the title, trophy, most valuable player award and the right to represent the Navy at the All-World tournament.

Other tournament teams included Great Lakes Naval Training Center, Atlantic Submarine Force, NAS Kingsville, Texas, and Honolulu Naval Communications Station.

Paced by the one-hit pitching of Joe Lynch, *Sperry* beat the defending champions, the Atlantic submariners, 2-0, in the first game of the tournament. The game settled a year-old grudge, as the Sea Raiders defeated *Sperry* in last year's title game.

The Great Lakes team then stepped in to down Kingsville and Honolulu in order, 2-0 and 3-0. In the fourth game of the double-elimination tourney, Kingsville recuperated from the loss and took the Sea Raiders out of the running with a 1-0 win.

Joe Lynch won a pitchers' duel in the following game as *Sperry* and Great Lakes came face to face for the first time in the tournament. Lynch pitched the first of his two no-hitters, striking out 19 and allowing only three walks for the 1-0 win. Wayne Danner, the losing pitcher, gave up three hits.

The Hawaiians fell by the wayside







TOP GOLFERS Earl Brown, Betsy Peeney and Jim Kinder won golf titles in their repective divisions in the All-Navy Golf Tournament at NAS Whidbey Island.

in the next game, losing to the Kingsville team in the highest scoring game of the tournament, 11-8.

Great Lakes then defeated Kingsville for the second time, 5-0, to move into the finals against *Sperry*.

In the championship game the *Sperry* Tridents capitalized on four Great Lakes errors and a second no-hitter by Lynch to win the crown, 2-0.

The win signified the second All-Navy championship in three years for the *Sperry* men, who won in 1961-62. They were runners-up in last year's contest.

Lynch was given the most valuable player award after the final game. In his three trips to the mound he struck out 46 men and gave up only one hit.

Final Standings

Sperry	3-0
Great Lakes	3-2
NAS Kingsville	2-2
NavComSta Honolulu	0-2
SubLant	0-2

CRESCENT CUP won by Chief Morine as highest Navyman in President's Cup competition at rifle matches.



All-Navy Golf

AMONG THE 41 contestants in the 1964 All-Navy Golf Championships, two Coast Guardsmen made their presence felt by finishing first and in a tie for third place in Open Division competition.

Earl Brown, ENCM, USCG, took top honors with a 72-hole total of 284 on the par 70 Gallery Golf Course at Whidbey Island, Wash.

At 293, in second place was Commander Bill Whisler, USN.

Ron Hallet, YN3, USCG, lost a stroke to Lieutenant Ben Jennett, USN, in the final round to tie him for third at 294.

In the Men's Senior Division Commander Jim Kinder repeated his performance of last year by again beating Commander Ed Peck for the title, this year in a sudden-death playoff.

Tiny Lieutenant (jg) Betsy Peeney won the Women's Division with a 354 total, 16 strokes ahead of her nearest competitor.

With a three-stroke lead over Whisler going into the final round, Chief Brown picked up five strokes in the first six holes. He finished with a one-over 71, as Whisler skidded to a 77. Brown also was medalist with a 68.

Whidbey "hometown" favorite, Brown plays most of his golf at Gallery. Earlier in the season he won the Gallery club championship, and qualified for the All-Navy by finishing second in the 13th Naval District and Pacific Coast Regional tournaments, both held there.

Joe Aiken, DN, who beat Brown in the PacCost Regional, finished in a tie for sixth place.

Kinder ended the Senior Division race Arnold Palmer style, coming from three strokes back in the final round to tie Peck at 302 at the end



of the regulation 72 holes. After picking up four strokes on Peck on the front nine, Kinder faltered and had to win the last hole to gain a tie. He won the title with a birdie on the first hole of the playoff.

Lieutenant Jim Olson, who started the final round in second place, two strokes back of Peck, shot himself out of contention with an 82. He finished third for the second straight year.

The win gave Kinder his fourth trophy in All-Navy competition. He has won the Senior Division two consecutive years and captured the Open division titles in 1955 and 1957. He was also Inter-Service Senior Champion last year.

Opening with a first-round 86, LTJG Peeney was never less than five strokes in the lead in the Women's Division. Her closing 95 was the only round topped by other golfers.



The Naval Air Station, Los Alamitos, Calif., was a popular place for Olympians to practice before going to Japan. Members of the U. S. Water Polo team, shown above, spent three weeks churning up the water in the station swimming pool before their trek to Tokyo. While they were in the pool, the U. S. Amateur Baseball Team arrived for seven days of practice and two exhibition games before they, too, went west.

Second place in the Women's Division went to Lieutenant Commander Claire Moulden.

ALL-NAVY GOLF SCORES

Open Division

Earl Brown, ENCM	68-70-75-71—284
CDR Bill Whisler	73-71-72-77—293
LT Ben Jennett	70-76-73-75—294
Ron Hallett, YN3	71-73-74-76—294
Louis Honsen, SN	75-68-80-73—296
Joe Aiken, DN	73-77-76-72—298
LT Jon Windness	73-71-76-78—298
LT R. "Skip" Duprey	74-75-73-77—299
Ed Schwarting, YN3	71-71-80-80—302
Mel Starks, SN	74-72-81-93—310
ENS Ron McLead	79-75-79-77—310
LTJG Bob Wittig	69-75-84-82—310
ENS Gerry Mollencop	82-73-78-79—312
Shelby Smith, YN3	74-77-82-81—314
Andy Mosley, AE1	77-76-82-83—318
Ron Marsch, TD1	82-84-76-80—322
Doyle Dugger, ETC	76-75-86-86—323
LT Denny Stoops	78-85-85-89—337
CWO Word Frye	80-78-81—Withdrew
Donny Brisbin, SN	78-82—Withdrew

Senior Division

*CDR Jim Kinder	73-75-80-74—302
CDR Ed Peck	76-75-74-77—302
LT Jim Olsen	72-76-79-82—309
CDR C. O. Parrish	75-81-75-79—310
Lance Mayfield, AK2	75-78-75-83—311
CAPT James Ireland	76-83-79-79—317
LTCOL Charlie Metzelaars	82-83-84-90—339
CAPT. L. J. Papos	82-86-84-87—339
George Geary, HM2	85-81-90-84—340
CAPT Bill Gregg	84-87-82-90—343

Women's Division

LTJG Betsy Peeny	86-86-87-95—354
LCDR Cloire Moulden	91-92-94-93—370
Margoret Cozod, PN1	101-89-93-91—374
CDR Betty Brown	98-93-98-97—386
LCDR Margaret Donoghue	106-99-90-99—394
LT Geroldine Witt	99-96-101-109—405
LT Lynn Clinton	103-99-92-112—406
LCDR D. J. Green	106-97-98-105—406
LCDR Margaret Coates	101-103-104-114—422
G. L. Norris, SK1	104-106-110-109—429
Bonnie Confield, YN3	120-115-116-122—473

*Won playoff

National Rifle Champ

"Chief Morine, your last shot for record is a V."

Daniel F. Morine, Jr., EOCS, had set a new national record to become the first Navyman ever to win the National Service Rifle Championship. Over 3200 competed in the matches.

Morine's winning aggregate score of 792-76V out of a possible 800-160V erased the year-old record of 790-69V set by Marine Sergeant David Luke.

Under the scoring system used in the high-power rifle matches, the 800-160V means there are 800 possible points and 160 possible Vs, the "V" being the most centered portion of the bull's eye. The championship is determined by the total, or aggregate, scores fired in the President's Match, Marine Corps Cup, Air Force Cup, Coast Guard Trophy, Army Cup, Navy Cup, and Nevada Trophy competition.

In the first match of the competition, the President's Match, Morine shot a score of 148-3V, two points below the winner. He won the Navy's Crescent Cup, awarded to the highest scoring Navyman in that match.

On the second day of shooting, Morine shot a score of 100-6V in the Marine Corps Cup event. In the Air Force Cup competition he shot 98-11V.

By dropping two points in the Air Force Cup Match, Morine was pressured into a position of having to shoot a near-perfect score in the Coast Guard Trophy Match to continue the pace toward the championship. Not one to slack up, he fired 100-11V.

The next day, in the Army Cup Match, which consists of two sighting shots and 20 rounds for record, Morine shot a near-perfect 99-16V.

With his first 10 shots in the Navy Cup Match, Morine dropped two points, firing 48 of a possible 50. Knowing he could not afford to lose another point, the Navy marksman

Here's Your Schedule—Where Are Your Champs?

For planning purposes, here's a list of the dates for 1965 All-Navy and Interservice sports championships. Further information, such as the designated regional coordinators, squad sizes, rules and sites will be released at a later date. For the time being, commands anticipating participation in the 1965 All-Navy program should plan on the following:

Basketball, 22-26 February
Volleyball, 14-16 April
Boxing, 26-28 April
Bowling, 10-14 May
Wrestling, 24-28 May
Swimming and diving, 21-23 July
Tennis, 27-30 July
Golf, 30 Aug-2 Sep
Softball, 6-10 September

1965 Interservice championship dates and hosts have been set as:

Basketball, 10-13 March (Army)
Volleyball, 19-23 April (Navy)
Boxing, 5-7 May (Air Force)
Wrestling, 9-11 June (Navy)
Tennis, 4-7 August (Army)
Golf, 6-10 September (Marine Corps)

Provisions regarding eligibility, orders, regional assignments and similar information are contained in the *Special Services Manual* (NavPers 15869A), Sections 2113, 2114 and 2115. Teams and individuals electing to participate in eliminations leading to All-Navy championships should bear in mind that they will be expected to represent the Navy at higher levels of competition if so selected.





TORCH BEARERS signaled start of *Topeka's* own Olympiad. *Rt:* Waseda University karate team demonstrates skills.

fired 10 straight bull's-eyes, for a 98-3V total.

When the scores went up after the Navy Cup competition, Morine led the field in aggregate competition by just two points.

The following day firing was held in the Nevada Trophy Match, the final match of the competition. Morine dropped a point at 300 yards, and his competition moved up to one point behind him.

Again firing under pressure, Morine fired 10 bull's-eyes from 600 yards. The last shot for a record was a V—for victory.

—Kelly Gilbert, JO2, USN

Home-Made Navy Olympics

When you can't go to the Olympic Games, men from uss *Topeka* (CLG 8) and Destroyer Flotilla Five will tell you what to do as a substitute. Hold your own version of the Olympiad.

That's what these two Navy commands did, and Navymen in Yokosuka, Japan and Honolulu, Hawaii didn't miss the bigtime Olympics a bit. Well, hardly.

Unable to attend the Olympics at Tokyo due to *Topeka's* operational commitments, her crew sponsored a variety of contests between U. S. and Japanese teams. Eleven Navy commands and seven Japanese school and military activities were represented.

The main event was a gridiron clash between the U. S. Navy *Seahawks* and the Keio University and Rikkyo University *Thunders*. Other events of the day included basketball, volleyball, tennis, softball, bowling, table tennis and handball contests with a sprinkling of judo and karate demonstrations.

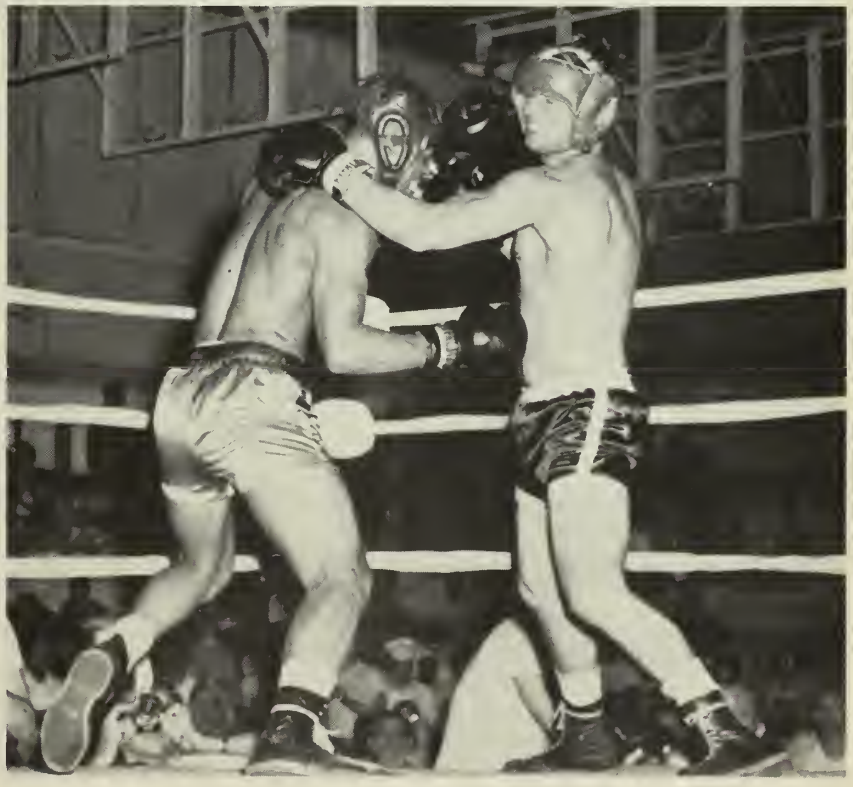
Guests of *Topeka* were 90 Olympic contestants and other notables, representing 12 countries.

The men of Destroyer Flotilla Five, at Pearl Harbor, gave their Intra-Flotilla Olympics a Navy twist. Their games allowed the destroyermen to demonstrate their knowledge and ability in various phases of seamanship and military athletic skills.

Events included underwater swimming, a water lifesaving race, dungaree swimming relay, 800-yard running relay, stretcher-carrying race, lifesaving race using the fireman's carry, field-stripping and assembling .45-caliber pistol and M-1 rifle, accuracy and distance tests with a heaving line, accuracy tests with a line-throwing gun, and physical fitness exercises.

uss *Lansing* (DER 388) won the games with a total of 44 points. uss *Walker* (DD 517) placed second.

TOUGH TANGLE—Boxers from *USS Constellation* (CVA 64) and *USS Bon Homme Richard* (CVA 31) slug it out during one of five matches in smoker.



Collecting for Scrap

As you may recall from our few terse words in the September issue of ALL HANDS, SCRAP is a program concerned with the elimination of excess paperwork. At that time we asked for comments and suggestions from Navymen everywhere and of every rank and rate as to how this happy state could be achieved.

Below, you will find some of these suggestions, with the reactions of the SCRAP powers-that-be. We reprint the correspondence here in the hope that it might stimulate you to



propose further ideas. If such a brainstorm should strike you, don't nurse it. Get rid of it immediately by sending it on to

Project SCRAP
Naval Inspector General
Navy Department
Washington, D. C. 20370

To the Scrap Heap:

The current effort of Project SCRAP to eliminate unnecessary and unessential paperwork in the Navy has come to my attention. I concur in the effort wholeheartedly.

However, based upon my experience, there is an area of paperwork that is difficult and needs special attention. This is the continuing demand by headquarters offices and agencies in Washington, D. C., for information and, therefore, reports. Such requirements are too frequently laid on without consideration of the fact that the information is already available within the information systems of the requesting office. The requester finds it easier to demand the information over again than to locate it in his own system.

The reply to complaints about necessity or duplication is that the Secretary or the Director requires the information, and, therefore, it must be furnished.

Until this problem can be resolved, a significant reduction of paperwork cannot take place.

Respectfully,
A Captain, USN

• *Your remarks are pertinent and appreciated. The problem is recognized, and an effort is being made by those same offices, headquarters and agencies in Washington to resolve it.*

To the Scrap Heap:

In our office, we receive a steady stream of material (which we use) that arrives in fresh, large, clean manila envelopes—which have been used once, and must therefore be thrown away; envelopes, that is, which could have a long re-usable life, if they could be sent through the mails more than once.

My suggestion is this: why not seek approval from the Post Office for a multiple-use envelope: This would be a clasp-type kraft or manila envelope, with spaces for eight addresses and return addresses. A clasp envelope costs about twice as much as a plain one, but if it could be used eight times, the over-all costs would be one-fourth of what they are today. I suspect that there are a lot of envelopes being thrown away every day in the Navy—in the whole U. S. Government, for that matter. What do you think?

—James E. Putman, JOCA

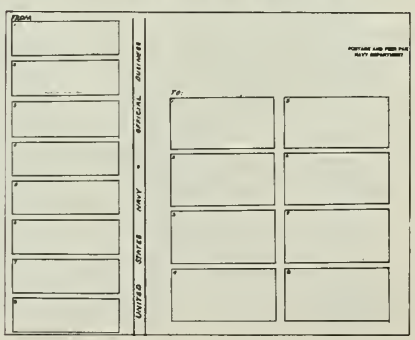
• *We are enthusiastic about this idea and will get to work on it.*

Dear Scrap Heap:

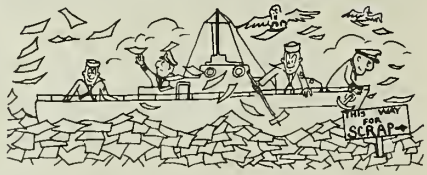
We don't save much time on our ship by not having to type the ship's log, and I suspect that the same situation may apply on many Navy ships.

Even though the regulations specify that errors will be corrected by drawing a single, neat line through the error, and initialing the margin to verify the deletion, our commanding officer will not allow a log to leave the ship unless it is letter-perfect. We frequently have to copy the whole log over several times, using up the time of six officers instead of one yeoman—and the yeoman is still involved, because he has to chase the officers all over the ship to get them to re-copy or re-sign their entries.

MULTIPLE-ADDRESS ENVELOPE



That's on my ship; and I know of at least one ship where, because the XO is not satisfied with the penmanship of most of the officers, the CDO has to copy the whole log every day



—and then send it around for signatures.

I think I liked the old way better.

LT Anonymous

• *We can't legislate against personalities; we can only try to teach the perfectionists that not all things need to be "perfect." Shiny, clean, letter-perfect logs, and logs all written by one hand are dead giveaways of time wasted in rewriting. Logs are not supposed to be pretty, just accurate and legible.*

To the Scrap Heap:

Here we go again! Another drive to reduce paperwork. As if we didn't have enough surveys going on. I've seen so many of these drives, and for my money they don't amount to a thing. Why? They never come to grips with the basic problems, and as a result nothing lasting ever gets done.

During these drives all hands become paperwork-conscious, but as soon as the heat is off, they all go back to the same old senseless procedures.

There is no question but that paperwork is a constant threat to combat readiness. Are you going to scratch the surface again this time, or really dig into that "Scrap Heap" until you actually get to the bottom of things?

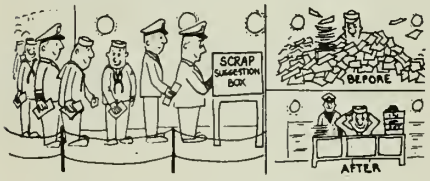
These are questions which might cause a short-windedness in the sails of such a project. If these questions

can be answered, truthfully, this sailor will be most appreciative.

A. Sailor

• *Your letter reflects a common attitude, and we hear it quite frequently. All we can say is that the people involved in PROJECT SCRAP mean business! We intend to find the cause of the problem and get something done about it that will last.*

You might be interested to know that Project SCRAP is truly a Navy-wide program with skilled, professional people, both military and civilian, working on the Project. Every bureau and office of the Navy Department is working to reduce paper-



work in their area. The Naval Inspector General is the over-all manager of the project.

To the Scrap Heap:

I have noticed in command files many instructions that are obsolete. My suggestion is to put a cancellation date on instructions. How about it?

Dennis J. Woods, RD1
USS Muliphen (AKA 61)

• *Radarman Woods has hit a sore spot in the directives system. While the determination of a cancellation date on instructions would be very difficult—and the purpose of an instruction is to issue material of longer duration—the problem here is to have commands get back to the book —SecNavInst. 5215.1A—which says review instructions annually for updating and get rid of obsolete instructions. Do this and a very real problem in the directives system will be eliminated.*

Meanwhile, back at the Department, action is underway to get official sanction of TyCom lists of directives that must be held by their ships. You probably will be hearing more of this idea in the near future.

To the Scrap Heap:

Here's my suggestion to speed up administrative traffic and reduce paperwork. Units endorsing correspondence submitted by subordinate commands and "Forwarding, recommending approval," should merely stamp or initial the correspondence. After all, what else is needed?

A simple stamp which registers time, date and organization on correspondence would speed it on its way in the same day it was received. An officer's code or billet designator could also be included in the stamp in the event re-referral should be necessary. The only time a piece of paper need be appended would be when the forwarding command has a definite contribution to make to the correspondence.

An alternative would be to send the letter directly to the final addressee with copies to all in the chain of command. If those units receiving copies have any valid comments, they should send them on to the final addressee within a stipulated time, perhaps one week: in other words, speak out within seven days or forever "hold their peace."

Thank you for my opportunity to express my ideas. I hope that Project SCRAP is a success.

M. F. Kenny
LTJG, Staff, *ComPhibLant*

• *We'll look into this. Any comments from the chain of command?*

• Several Scrap Heap suggestions have touched on the question of indefinite enlistments instead of the present system of definite term enlistments. We referred these to the Bureau of Naval Personnel for evaluation, and here is the reply:

"The use of indefinite enlistments has been previously proposed and was the subject of considerable study. It was concluded that the use of indefinite extensions would not be in the best interests of the individual or the Navy.

"Pertinent to this decision was that this procedure would endanger existing reenlistment benefits, since it would tend to place career enlisted men in the same position as career officers, with no periodic entitlements to accrued leave settlement or mileage pay. Such an enlist-



ment contract would also deprive individuals of constructive service for transfer to the Fleet Reserve.

"In addition, it would probably concentrate discharge requests into periods immediately prior to deployments and transfers to unaccompanied tours."

Now send your suggestions in. Let's make this a big Scrap pile.

Fitness Report Paper Work Reduced Via Project Scrap

Officer fitness reports have run the *Project Scrap* gamut and emerged with two changes. Basically, however, they remain the same—they're still the most important part of the officer's record.

The first change, in essence, allows space for you to be graded in connection with *Project Scrap*—your efforts to reduce the amount of burdensome and unnecessary paperwork. This directly contributes to the Secretary of the Navy's program to become more economical and efficient, and maintain combat readiness.

Second, the additional periodic reports on commanding officers, executive officers and operation officers of ships and Fleet aviation squadrons are no longer required. Now only the once-a-year fitness reports need be made.

Another item, though not a change, was clarified in order to cut down on a considerable amount of paperwork. This is the special fitness report. Apparently this was misunderstood, since many reports, obviously intended as supplements to previous routine periodic reports, were submitted to the Bureau of Naval Personnel for file.

The special fitness report is to be made only when an officer distinguishes himself in battle, performs an outstanding act of valor or devotion to duty, displays extraordinary courage or, on the opposite end, is guilty of serious misconduct or marked inefficiency. Also, there may be cases where the Bureau asks for a special fitness report.

On the other hand, if reporting seniors wish to supplement a routine report, they may write a letter which will be added to the officer's earlier report.

If you'd like to read more on *Project Scrap*, check the September issue of ALL HANDS (p. 32, 33). And if you want more information on officer fitness reports, BuPers Inst. 1611.12 has all the facts.

LETTERS TO THE EDITOR

Strange Flags on Merchant Ships

SIR: I've been trying to figure out the system followed by various merchant vessels for flying flags. I have noticed some ships coming into port with the American flag flying from the foremast, but with another national flag flying from the aftermast.

Does this mean that such a vessel is registered in a foreign country and is employed by an American firm, or what does it mean?—T. S., SN, USN.

• *It means that the ship is owned or operated by a foreign firm, but not necessarily that it is under American employ. The flag protocol followed by merchant ships requires that the owner or operator of a vessel fly his own flag from the aftermast (usually the mainmast) and when in a foreign port, fly the flag of the host country from the foremast.*

The publication "Flag Protocol" (Hydrographic Office Chart 1401), available from the Naval Oceanographic Office, Washington, D. C., for 30 cents, may be of interest for any additional questions you may have concerning flags—ED.

Lineal Numbers at Pensacola

SIR: About a year ago I was commissioned as an LDO(T) and sent through the Pensacola pre-flight school.

Before my commissioning I had been an E-9. Another man in my class was an E-8, and still another had been an E-7 (who had been an officer during World War II).

I graduated from pre-flight as an honor man, and the E-8 was in second place. The E-7 ended up in the lower third of the class.

Yet when the lineal list came out I had the highest number of the three and, consequently, was the junior officer. The E-7, who had been near the bottom of the class, had the lowest number of the three, and the E-8 ranked between the higher and the lower.

This seems like a strange way of doing things, but maybe there's an angle I don't see. Can you enlighten me? —W. A. L., LTJG, USN.

• *We also thought your story was a bit unusual, so we sent your letter up to the active officers promotions branch here in the Bureau. We figured they would know, if anyone would. Seems there is an angle, but it all sounds logical once the facts are in.*

In the first place, your lineal number has nothing to do with your class standing. It was assigned in accordance with your performance before *your commissioning—you and your two colleagues were commissioned before you reported to Pensacola. Consequently, your performance at school could not affect your lineal number.*

We don't know why the E-7 received seniority over the E-8 and yourself. Only the selection board can say for sure, and it isn't talking. However, it's reasonably sure that your relative positions were assigned on the basis of your officer battery test score, service record, and your application for the LDO program. (Sorry to bring this up, but you asked).

You probably received the impression that class standings did have something to do with your lineal numbers because the cadets, who were your classmates, did *receive their lineal numbers because of their class standings.*

However, this is different. Bear in mind that they entered school while uncommissioned and had yet to prove they were worthy of becoming officers. So they went through school, and then were commissioned. Since their lineal numbers were dependent upon their past military performance — which in most cases existed only in their brief career at Pensacola—their lineal numbers were assigned in accordance with their class standings.

As we've already mentioned, this would not apply to you, as you and your two commissioned classmates had been assigned lineal positions by the selection board before you reported to school. All clear, now?

One further thought. All this isn't to say that your school work was for naught. Although your status as honor man did not affect your seniority, it did become a part of your record and, consequently, a part of your performance grade for that period. As you well know, demonstrated superior performance is the best assurance of selection for promotion a naval officer can have. This includes, of course, performance under instruction.

Frankly, congratulations.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

Ever Hear of Manley?

The Naval History Division is constantly in need of detailed information to write, refine, and update ships' histories. An extensive search is now underway for information on *Manley* (Torpedo Boat 23) and *Manley* (DD 74/APD 1).

Your recollections, anecdotes, pictures and, specifically, information on locating the Navy Unit Commendation Plaque awarded *Manley* (DD 74) may be forwarded to the Director of Naval History, Navy Department, Washington, D. C.

Mess Bills Afloat

SIRS: It has irked me somewhat in the past that an officer's mess bill is a deductible item on his income tax return under certain conditions, such as when his ship is at sea.

As you undoubtedly know, all officers receive a monthly subsistence allowance of $47.88 which is non-taxable. This allowance is for the express purpose of paying their mess bill which, I might add, rarely (if ever) exceeds their subsistence allowance.

This deduction seems inequitable to me and, as a taxpayer, I question it.—W. B., YNC, USN.

• *A taxpayer who isn't disgruntled about something is indeed a rare bird, perhaps even extinct. Indeed, he may never have existed in the first place.*

The case you cite is the result of a revenue ruling (55-572, C. B. 1955-2, 45) which holds that subsistence allowances are paid independently of whether a member is required to travel and, therefore, the subsistence allowance need not be offset against the travel expense deduction of mess bills afloat.

If this answer doesn't provide balm for your injured sensibilities, reflect that enlisted men receive sea and foreign shore duty pay and tax-free clothing allowances. Officers do not.

Enlisted men serving in the Korean combat zone from 24 Jun 1950 through 31 Jan 1955 could exclude all their pay including shipping over money. Commissioned officers could exclude only $200 per month for federal income tax purposes.

There are also other instances in which enlisted men have the advantage over officers in tax and other fiscal matters.

Don't get us wrong. These examples aren't an attempt to make it seem that tax benefits for all categories are equal. Federal law doesn't attempt to equate them. However, all military personnel do receive consideration in the field of

income taxes; for a rundown on the rules applying to service personnel, see the December 1963 issue (page 71). —ED.

Release with Physical Disability

SIR: While conducting the standard physical examinations on men being discharged upon expiration of enlistment, we have processed some who have physical defects such as lacerations involving tendons and fractured hands and legs. We must send these men to the local hospital for evaluation to determine the degree of their disability and whether the disability is of a temporary or permanent nature.

Some of these men have returned from the hospital with a chit saying they can be released if they wish to "sign themselves out."

BuPers Manual states that a man can be held over his expiration date *with his consent* to receive medical treatment. I would like the following clarified, since I am not able to obtain further concrete judgment on the subject:

1. Can a man with a physical defect be held over his EAOS against his will?

2. If a man can elect to accept a discharge regardless of his physical condition, and he does so, how does a medical officer rate the man—fit or unfit for discharge?

3. What effect does it have on future claims against the government if a man signs a statement that he wishes to be discharged in spite of a disability?

It seems to me that it would not be in the best interests of either the individual or the government to award a discharge when a disability exists.—J. S., HMCA, USN.

• *We are in accord with your last statement, especially as it pertains to the individual. It would not be in his best interest to accept a discharge under the circumstances you describe.*

But he can get out if he so wishes. A man having a physical defect at time of separation from active duty — even though further treatment is required— cannot be retained beyond his EAOS against his will.

"BuPers Manual," Art. C-10304(5)(e) (CH-10) provides that a member may be retained beyond his EAOS for necessary treatment of a defect. If he does not wish to accept it, he will be advised by the examining officer that he is unfit for separation. Then he must sign the statement on the reverse of SF 88 and another on page 13 of his service record stating that he desires separation on his normal expiration of active obligated service; that he understands he will not be eligible for further follow-up studies or treatment at a U. S. armed forces medical facility; that he will be ineligible for disability benefits under laws administered by the Navy and that any further treatment and/or benefits would be under the jurisdiction of the Veterans Administration.

But under normal circumstances, personnel being processed before a physical evaluation board will not be released from active duty or discharged until final action on their case has been completed by the Secretary of the Navy and instructions are received from the Chief of Naval Personnel.

Change 10 to "BuPers Manual" contains the procedures to be followed in cases where a Navyman requests discharge, notwithstanding the fact that such separation may prejudice any rights or benefits to which he may be entitled as a result of physical evaluation board hearings.—ED.



ARRESTING CABLES, steam catapults and other flight deck gear make safety consciousness a must aboard aircraft carriers such as *USS Hancock* (CVA 19).

Yes Sir, Quite A Cruise

SIR: On page 25 of your July issue was an article on USS *Ormsby* (APA 49). For me it made for interesting reading, since I was her first commanding officer.

FISHERMAN Frank Bocchiaro, ADJ1, USN, holds largest (10-pounder) of 15 'Stripers' he has caught this year pier-fishing at NAS New York.



Ormsby, like all others of her type, was placed in commission with about 64 officers and something like 460 enlisted men. Trouble was, only six of the officers and 70 men had ever been aboard a ship before. We were commissioned and immediately ordered into the Tarawa operation; as you can see, it promised to be a lively cruise from the very beginning.

I well remember when, at Wellington New Zealand, Colonels Merit A. (Red Mike) Edson and David M. Shoup came aboard and told me they'd like us to take a group of Marines on board and train them for their next operation, which turned out to be Tarawa. I told COL Edson that it was *our* crew which needed the training, not the Marines. Nevertheless, we took their men on board and made a fine showing at Tarawa, despite our lack of experience. As a matter of fact, our ship received a well done from our superiors every time we participated in an operation.

Ormsby returned to the U. S. in December 1944, and I was relieved. About that time she was transferred to the War Shipping Administration along with her two sister ships. All three were sold and renamed *American Producer* (*Ormsby*), *American Planter* formerly *USS Pierce* (APA 50), and *American Scientist* formerly *USS Sheridan* (APA 51).

Later, when I was attached to the Third Naval District, I had the pleasure of enrolling all three ships in the Naval Reserve.

Incidentally, you said you didn't know how many miles *Ormsby* steamed between her departure from the States and her return to San Pedro. I do. 79,964.—Rear Admiral Leonard Frisco, USN (Ret.)

• *Thanks, Admiral, for the added information. The details which make a story come to life can only come from someone who was on the spot.*—ED.



AMMUNITION SHIP *USS Mauna Kea (AE22)* is *Suribachi* class built from keel up to meet strenuous requirements of fast underway ammunition transfer.

Extraordinary Heroism

SIR: Reading your July issue, I came across a paragraph in which you stated: Any enlisted person who has been credited by the Secretary of the Navy with extraordinary heroism in line of duty is entitled to an increase of 10 per cent in his retainer pay when he is transferred to the Fleet Reserve.

Would you tell me what reference you used?—R. M. M., FTGI, USN.

• *Happy to oblige. You'll find it in SecNav Instruction P-1650.1C (Navy and Marine Corps Awards Manual), Article 114.4, and Article C-13405(3), "BuPers Manual."*—ED.

Differential for Heroism

SIR: A retired shipmate of mine tells me he receives a 10 per cent differential in his normal retainer pay because he was awarded a commendation with a combat "V" during the Korean conflict.

He also tells me that I will receive a 20 per cent addition to my retainer pay when I join the Fleet Reserve because I earned two such decorations.

Is this true or is my friend talking through his hat?— J. W. Y., BMC, USN.

• *Your friend knows not whereof he speaks. At best, you would be entitled only to a 10 per cent increase in your retainer pay.*

Here's how it works:

Section 6330 of the U. S. Code's Title 10 provides that a Fleet Reservist is entitled to a 10 per cent increase in his retainer pay if the Secretary of the Navy credits him with extraordinary heroism in the line of duty.

When you join the Fleet Reserve, the Secretary's board of review studies your record. If the members of the board credit you with extraordinary heroism, the 10 per cent differential in retainer pay is yours. However, nobody is awarded a differential greater than 10 per cent regardless of the number of times extraordinary heroism was exhibited.—ED.

You CAN Take It With You

SIR: What's the deal on "selling leave" when an enlisted man is going to be discharged and commissioned an officer (LDO-type)? In other words, can a person, if he desires, be paid a lump sum for his accumulated leave rather than carry it over to his LDO record?

Another thing: Is it true that if an enlisted man owes leave at the time of such a discharge, he must pay the government?—J. B. R., MMC, USN.

• *An enlisted member who accepts an officer appointment in the Navy is not entitled to sell his leave. He is not considered to be discharged for the purpose of lump-sum leave entitlement.*

Likewise, an enlisted man with a minus leave balance doesn't have to worry about paying the government at the time of his change. Any balance (plus or minus) that is present when the man's status is changed is carried over to his new officer leave record.

This is spelled out in NavCompt *Manual, paragraphs 044170 and 044241-3b, and* BuPers Manual, *articles C-6501(2) (a)* and *C-6402(3).*—ED.

Automatic Advancement? Almost

SIR: I'm presently attending Class A Stewardsman School and should graduate soon. The other day I heard a rumor that the top men in our class will, upon graduation, be automatically advanced to SD3.

According to the story these top men will be given the third class exams and those passing will be advanced immediately. Is there any basis for the rumor?—B. A., SN, USN.

• *Yes, the rumor is basically correct. But (as usual) the scuttlebutt has the details all wrong.*

Since late 1963, top grads in most Navy A schools have been automatically advanced if they met the qualifications for total obligated service. The percentage considered for automatic advancement depends on the type of school in question: The top 10 percent of all SD Class A school classes may qualify, while in some of the more critical skills this percentage may go as high as 50 percent.

If you graduate in the designated top percentage of your class here's what you must do to be advanced: Be on your first enlistment with a total of six years' obligated service (if you signed

NEW HOME PORT—*USS Charles Berry* (DE 1035) shifts to Pearl Harbor as part of a long-range program to move newer ships into the Hawaiian area.



up for four, you may extend). Complete six months in pay grade E-3 (if you don't have six months in grade upon graduation, your advancement will become effective when you do). Complete all training courses for third class. Be recommended by your commanding officer.

If you qualify, you are not required to take the examination for advancement in rating. For more details on automatic advancement for top A school grads, see BuPers Inst. 1430.14.

Good luck.—ED.

Few Calls for Skydivers in Subs

SIR: I jump with a local parachute club here in Scotland and was quite interested in your articles back in your May issue about skydiving.

I noted the new Navy and Marine Corps basic parachute insignia. What are the requirements to wear this? (I'm in the support end of the sub force and have little, if any, connection with naval aviation.)

Is it possible for me to wear these wings without going to jump school? What is the required number of jumps? Are there any schools in the United Kingdom—T. L., FTM2, USN.

• *Sorry, but you can't wear the Navy and Marine Corps basic parachute insignia unless you have completed jump school. As for schools in the United Kingdom, we don't know of any.*

Briefly, the qualifications for parachute duty require that you be physically and psychologically qualified. You must complete formal parachute training including at least five jumps at a military installation.

Before you can wear the new parachute insignia, you must make an additional five jumps (under orders). These must be performed at a naval activity whose mission includes jumping.—ED.



ALFA TOO—*USS O'Hare* (DD 889) has been working with Navy's Task Group Alfa for more than eight months keeping her sub hunting skills in top condition.

How About O'Hare?

SIR: We who are serving aboard USS *OHare* (DD 889) read with interest the article on Task Group Alfa in the September issue of ALL HANDS. It was a fine story and a tribute to the Navy's top ASW unit, but may we correct you on some vital points . . .

First, we of *O'Hare* are puzzled and upset over your failure to mention this destroyer, a member of Alfa for the past eight months. We are a member of this group and like to be mentioned as such.

Second, you will find that Alfa now contains the following destroyers from Destroyer Squadron 32: USS *Mullinnix* (DD 944), *Vogelgesang* (DD 862), *Stormes* (DD 780), *Holder* (DD 819), *Ellison* (DD 864),*E. A. Greene* (DD 711), *Putnam* (DD 757), *Conway* (DD 507), and of course *O'Hare*.

USS *Laffey* (DD 724), *D. H. Fox* (DD 779) and *Lowry* (DD 770) are no longer with us in the task group.

Finally, in the hope that *O'Hare* might get additional publicity, I have enclosed a photograph of the ship for your use.—Floyd D. Bowdey, CDR, USN, CO USS *O'Hare*.

• *These things do happen, and when they do we appreciate the effort taken to call them to our attention. Now you have set the record straight. Thanks.*—ED.

Service Stripes Versus Ribbons

SIR: I have often wondered why the Navy doesn't do away with service stripes and substitute a service ribbon.

The ribbon itself could represent four years of service with a bronze star added for each additional four-year period. After 20 years, a silver star could be worn instead of four bronze stars.

It seems to me that hashmarks do nothing at all for the uniform's appearance and, in addition, are hard on the pocketbook. Each time a man serves four years, all his hashmarks have to be changed so the colors will match the new addition and give the uniform a neat appearance.

When a man has sufficient service to rate gold hashmarks, the pocketbook really takes a beating. All in all, it doesn't seem to be a particularly fitting reward for 12 years of good service and I would be interested to know if other Navymen agree with me.—L. S., YNCA, USN.

• *To forestall the possibility of receiving several extra mailbags on the subject, we'll begin by saying that you're far from the first to make this suggestion.*

The possibility of using a ribbon or similar device to represent length of service has been considered many, many times by the Permanent Naval Uniform Board as well as the Secretary of the Navy's Board of Decorations and Medals.

The board's feeling on the subject has always been substantially the same

OLD & NEW—Old F3B Demon (top) shows new F8E Crusader the airways over NAS Cecil Field, Fla. as VF-13 retired last of NavAirLant's F3Bs in July.







THESE PICTURES were taken of *USS Farragut* (DLG 6), *USS Charles F. Adams* (DDG 2), *USS Newman K. Perry* (DD 883) and *USS Corsair* (SS 435) at Genoa, Italy. The difference between them is the difference between night and day.

—namely, that a ribbon or ribbon bar represents an act of heroism or meritorious service performed by an individual or unit or is for participation in a campaign during wartime or national emergency or for a non-military act of particular benefit to the United States.

The board feels that ribbons and medals should continue to be used exclusively for these purposes.

One Navyman whose gold hashmarks and rating badge were corroded by extensive exposure to salt air suggested that everyone wear gold hashmarks until they serve 12 years with good conduct, then be rewarded with permission to wear red.—ED.

A Long and Happy Navy Life

SIR: For some time now I've wanted to write ALL HANDS to express how I feel about the Navy, and what it has done for me.

I was 15 years old when I joined as an apprentice third class in 1903. My first cruise was on the square rigger USS *Alliance,* an apprentice training ship. Then I went to the "white ship Navy" where I served on battleships, cruisers, torpedo destroyers and a submarine. I also made a cruise around the world with what now is called the Great White Fleet.

As an apprentice I learned to take orders and to obey. Then, as the years went by and I advanced in grade, I learned to give orders and assume responsibility. I also learned other valuable lessons, such as what our Navy was doing and what our country, the United States, meant.

Later I married and raised two daughters. Each received a good education from school and travel. Navy pay was small at first; nevertheless we managed to live comfortably. We always knew that during trouble or sickness we would be well protected by the Navy.

There were times when I was separated from my family, sometimes for a couple of years. Upon my return, though, I felt compensated. And I was given a good share of shore duty where my family and I could be together.

We all felt we were a part of the defense of the U. S., and that meant a great deal to us.

When I left active duty on 31 Jan 1958, I knew I would never want financially. Those 55 years of continuous active service produced a good life for me.

I still hold dear to this day the officers and shipmates I met through the years. Even now I'm in contact with many. I've also served with many of the admirals who have made our Navy what it is today.

I want this letter to show my appreciation of what the Navy has done for me. If I had it to do over again, I'd do everything the same.

This, then, is my answer to those who ask, "What's the use? What can the Navy do for me?"—H. S. Morris, TMC, USN (Ret.)

CARD PLAYING—Crewmen of *USS Jack* (SSN 605) must be top hands if their insignia is an indication.



• *Thanks for your comments concerning your days in the Navy—all 20,017 of them.*

You mentioned the phrase "white ship Navy." This puzzled us a little so we did some checking and learned that ships of those days, well before the Great White Fleet, were painted white or yellow, with white as the predominant color. This was the case except when at war when ships were painted gray.

The fleet of ships which sailed around the world in 1907 and '08 were, of course, painted white, hence the "Great White Fleet."

We were also curious about your first ship, USS Alliance. *We found that she was originally built as* USS Huron, *but her name was changed to* Alliance *after she was launched in 1875. Commissioned in 1877, she was a screw steamer and later made into a wooden-hulled bark at the Norfolk Navy Yard. After this change, she was used as an apprentice training ship. In 1905 she was sent to Puerto Rico and used as station and shore ship until she was sold in 1911.*

It might also be of interest to present-day Navymen that you served in 41 different ships, retired at 70 years of age, and up until that time were still entitled to wear the figure-of-eight knot insignia that identifies a former apprentice boy. Not too many of these around any more, are there?—ED.

Here's Another Most for the Record

SIR: While I was teaching a class in the history of the submarine to our Sea Cadet division, someone asked what was the largest non-nuclear submarine ever built.

Sources available to me are conflicting. Three mentioned as largest are the French *Surcouf,* the American V class and Japanese I class. One source says the American V class was the long-

est but the Japanese aircraft-carrying I class had the greatest displacement.

Any clarification of this issue would be greatly appreciated.—H. R. P.

• *We'll do the best we can. Our experts believe the following were the largest diesel-electric subs built:*

In 1929 the U. S. V-5 had an over-all length of 371 feet, a 34-foot beam, displaced 2730 tons surfaced and 3960 tons submerged.

In 1940 the French Surcouf *was 361 feet long with a 29 and one-half foot beam, and displaced 2880 tons surfaced and 4804 tons submerged.*

One Japanese I class surpassed both the French and American subs in length, and another, probably the largest diesel-electric sub ever built, surpassed them in length and displacement. Both are 1945 vintage.

The I-14 was 373 feet long with a 38-foot beam, displacing 3830 tons surfaced and an estimated 4600 tons submerged.

The I-400 was 400 feet long with a 40-foot beam, and displaced 5700 tons surfaced and an estimated 7000 tons submerged—truly the monster of its day.

In contrast, our Lafayette *class nuclear-powered FBM subs today are 425 feet long with a 33-foot beam and displace 7250 tons standard and over 8200 tons submerged.*—ED.

Disposable Midsection

SIRS: We in USS *Navasota* (AO 106) enjoyed seeing the now famous picture of our ship in the August issue. My purpose in writing is to correct a somewhat misleading statement in the article which accompanied the picture.

Rather than being cut in halves and having an *extra* midsection added as you stated, the bow, stern and bridge structure of the original *Navasota* were added to a completely new midbody with an 01 deck over all. The old midbody was discarded.

Not only was cargo capacity increased but many other important changes were made. Among these are:

• The latest design in replenishment and fueling at sea rigs with ram tensioners and electric-hydraulic winches;

• Increased pumping capacity with new larger electric driven cargo pumps;

• Three 1500 KW auxiliary diesel generators to supply power for the deck machinery and cargo pumps;

• Improved habitability with air-conditioned office and living spaces, new ship's store, barber shop, library and additional laundry equipment.

—C. E. Smith CAPT, USN.

• *Thank you, sir for the added information on* Navasota *and how she grew. Also thanks for setting us straight on* Navasota *getting a completely new midbody.*

And what happened to the old midsection? Working for Uncle Sam to the very end, it was sold for scrap.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS MAGAZINE, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Bunker Hill* (CV 17)—A reunion is being planned for all who served on board during World War II, with time and place to be decided by mutual consent. Write to Edward O. Bedsole, P.O. Box 1323, Mobile, Ala.

• *Pre-flight Class 39-55*—A reunion for all class members is being planned for the near future. For details, write to Robert W. Driscoll, 2913 Stanton Avenue, Des Moines, Iowa 50321.

• *American Battleship Association*—The second annual reunion will be held at the Edgewater Marina Inn, Long Beach, Calif., 5-8 August. For information, write to American Battleship Association, P. O. Box 11199, San Diego, Calif. 92111.

• *USS Philadelphia* (CL 41)—The second reunion is scheduled for 12-14 August, in Philadelphia. Write to Frank J. Amoroson, 93 Dunbar St., Somerset, N. J. 08873.

• *15th Seabees*—A reunion will be held 30 July - 1 August at the Battery Park Hotel, Asheville, N. C. For details, write to Larry H. Cagle, P. O. Box 216, Clyde, N. C. 28721.

• *VP-54*—A reunion of all World War II members of VP-54 is planned for early next summer. For information, write to William J. Gladwin, 225 California St., San Francisco, Calif.

When Does School Stop?

SIR: Pertaining to the eligibility of certain personnel to attend class "B" schools: Is a CPO with 18 years' continuous active duty eligible to attend? I haven't been able to come across any official Bureau policy on this. I am aware that it would be necessary to extend my obligated service—R. W.

• *As a general rule "B" School is limited to E-7 with less than 14 years and lower petty officer pay grades. It is contemplated that this point will be made more specific in Change Nine of the "Transfer Manual."*—ED.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



FRIGATE USS *Richmond K. Turner* (DLG 20) is fifth ship in the "double-ender" *USS Leahy* class. The 533-ft. vessel carries *Terrier missiles* fore and aft.

Home Bases to Shift

Several Atlantic Fleet attack carrier squadrons will change their home bases during the next two years in a move to economize on support facilities. The plan: To concentrate aircraft of the same model at one location.

As aircraft weapons systems become more complex their maintenance costs rise. With a single type of aircraft at one location, the number of support facilities at that station can be reduced.

F4 *Phantoms* and A6 *Intruders* will be based at NAS Oceana, Va., while F8 *Crusaders* and A4 *Skyhawks* will have their station at NAS Cecil Field, Fla. Since entire squadrons will be exchanging duty stations, the total number of personnel at each station will remain relatively unchanged.

The movement and separation of squadron personnel and their families will be minimized by announcing changes far enough in advance to allow for planning the move and by permitting some exchanges of personnel between the squadrons.

Foxy Rigging Time Record

Rigging-wise, is tops in the Sixth Fleet also tops in the rest of the Fleet? USS *Douglas H. Fox* (DD 779) wants to know.

This ship claims the Sixth Fleet record for underway refueling rigging: forward station time, one minute three seconds. This was accomplished while alongside USS *Chukawan* (AO 100) in the Med.

Also, stand by for better things to come. Reliable sources on *Fox* were quoted as saying she will rig in 45 seconds before she heads home. Does this mean an extended deployment, Bos'n, or are you with it?

BUILDERS OF THE NAVY



Captain Isaac Hull was in command of USF *Constitution* during her memorable encounter with Guerriere. The United States was a newcomer to the community of nations and a defeat at sea by a strong European power would have dealt a stinging blow to the pride and confidence of the young nation. However, when *Constitution* met Guerriere in battle, Hull moved among his men with words of assurance and confidence which inspired his crew to stand firm. The battle ended within 20 minutes with Guerriere reduced to a wreck and earning for *Constitution* her well known sobriquet, "Old Ironsides."

New Construction

A total of three ships have joined the Fleet from both sides of the country. Two guided missile destroyers were commissioned at Seattle—USS *Waddell* (DDG 24) and *Benjamin Stoddert* (DDG 22). Built as *Charles F. Adams* class DDGs, they are 437 feet long and have a full-load displacement of 4500 tons. They'll be armed with *Tartar* surface-to-air missiles, *Asroc* antisubmarine rockets, two 5-inch/54 caliber guns and antisubmarine torpedoes.

Construction on *Waddell* began in February 1961. The following February, her keel was laid; one year later she was launched.

Stoddert's keel was laid in June 1962; she was launched in January 1963.

Meanwhile on the east coast, the 26th nuclear powered Fleet ballistic missile submarine, USS *John C. Calhoun* (SSBN 630), was commissioned at Newport News, Va.

The submarine's keel was laid in June 1962; she was launched one year later. *Calhoun* is capable of firing the *Polaris A-3* missile.

As with other Fleet ballistic missile submarines, two complete crews, Blue and Gold, will man her.

In addition to the three ships, two non-seagoing type units are now part of the Navy. At Charleston, S. C., a drydock (the second built since World War II) was dedicated; it is the first one specifically designed to service nuclear submarines.

With a 140-foot width, 750-foot length and 43-foot depth, the new dock features a depressed section in the floor just inside the entrance; this permits a sub with a large bow-mounted sonar dome to dock stern first.

Two *Polaris* submarines can dock at the same time. Other combinations, such as two guided missile destroyers, three smaller destroyers or one guided missile cruiser are possible.

While it takes only 90 minutes to fill the dock with 33,000 gallons of water, the time required to empty it is three hours.

The second non-seagoing unit was built at Bangor, Wash. It is a *Polaris* missile assembly facility—the second

such installation (the first, at Charleston, S. C., has been in operation since April 1960). Known as the Polaris Missile Facility, Pacific, the 430-acre installation will be the link between the producers of the missile and the Fleet.

About 300 military, civilian and contractor personnel will man the facility. Scheduled to begin its operation by the end of the year, the installation will assemble the missiles, give them a final check and load them into submarines and support ships.

Big Day for Chief Gonzales

While Chief Machinist's Mate R. A. Gonzales was sweating out his application for LDO aboard USS *Constellation* (CVA 64), his shipmates conspired to keep him on pins and needles longer than really necessary in order to give him a good sendoff to officer country.

The officers and chiefs of Squadron 143 maneuvered the first news of Chief Gonzales' appointment into their own pockets and were waiting in the ready room when the unsuspecting chief put in an appearance.

Shortly after Chief Gonzales entered the room, he was pushed toward the front where the squadron's commanding officer exchanged an officer's hat (a gift from the squadron's chiefs) for Gonzales' chief's hat.

The new limited duty officer was then given 10 minutes to go to his room, change to proper officer attire and return to the ready room.

The next time Gonzales appeared in the ready room, he wore the stripes of a lieutenant (jg) on his shoulder. Then he formally accepted his commission and took his oath of office, ending nearly 20 years of service as an enlisted man to begin a new career as an officer in the United States Navy.



WHEN COMMISSION as LTJG became imminent for Patrick O'Halloran, ADCS, he asked that his brother Joseph, also an LDO, give oath. Joseph obliged.

1900 Inspections Later

When Chief Shipfitter Vernon A. Dickson held a formal inspection of the crew of USS *Carter Hall* (LSD 3) recently, it was his last ceremony during a Navy career spanning 37 years. At the rate of one inspection a week, that was slightly more than the nineteen hundredth inspection in his seagoing career.

Dickson first entered the service in December 1925, for a two-year hitch in the Army. After much marching he considered the possibility of *mal de mer* less vexing than the certainty of blisters, so he enlisted in the Navy in 1927.

After boot camp, Dickson received orders to USS *Trenton* (CL 11), which took him to action in the Nicaraguan campaign.

Within weeks of the Japanese attack on Pearl Harbor he was heading west to help place damaged ships back in operation.

Dickson made chief shipfitter in July 1942. He served in the Pacific until 1948. Other duties have included sea time aboard USS *Blackhawk* (AD-9), *Texas* (BB 35), *Arizona* (BB 39), *Maryland* (BB 46), several four-stacker DDs, and a tour with the 1934 Alaskan survey expedition.

Fast Thinking, Heroic Action

A Navy pilot, whose RA-5C *Vigilante* crashed in a field near Sanford, Fla., recently, has been commended for his courage and quick thinking to avoid crashing in a populated area.

Lieutenant Commander James F. Bell, USN, was on final landing approach about one-half mile from NAS Sanford when he experienced complete hydraulic failure, which caused the plane's controls to freeze. Ordinarily, a crew should eject immediately in this situation.

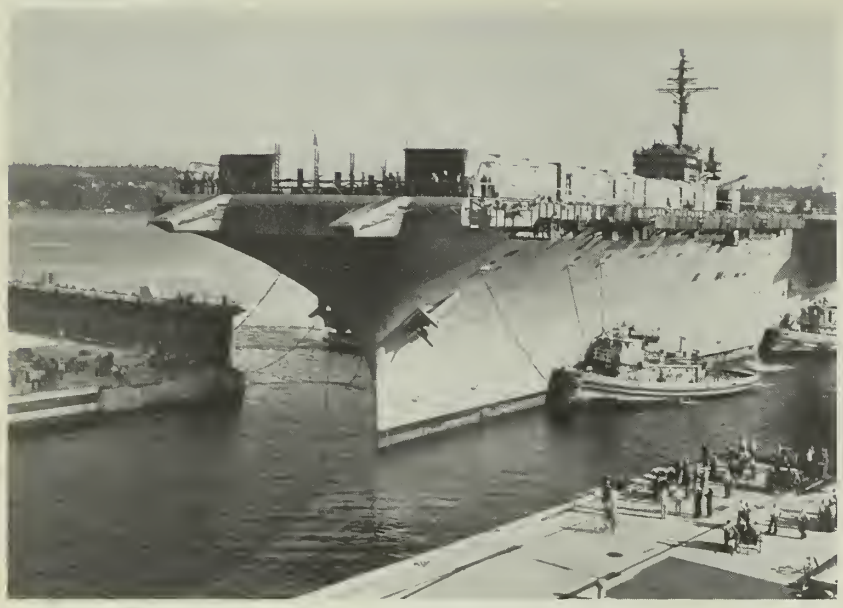
However, controlling the plane by differential power of the *Vigilante's* twin jet engines, LCDR Bell managed to remain airborne until his

AWARD—LCDR Wesley A. Brown, CEC, USN, receives SecNav Commendation for Achievement for his work in foreign assistance assignments.



WINGS FOR WAVE—Clara B. Johnson, PHC, receives Aircrewman wings and title of aerial photographer.





BIG DEAL—King-size carrier *USS Kitty Hawk* (CVA 63) is eased into world's largest drydock at Bremerton, Wash., where she will undergo major repairs.

plane was clear of inhabited areas. Then he gave the order for his bombardier/navigator to eject, and followed them.

By this time he had managed to climb from 300 to 3000 feet. The plane crashed in an open pasture and no one was injured.

Bell's commendation was presented to him by his commanding officer during a monthly meeting of Reconnaissance Attack Wing One. The pilot is attached to Reconnaissance Attack Squadron One (RVAH-1).

Those Planes Cost Money, Man

What started out as no more than a routine test flight ended with an 800-foot scrape. Lieutenant Karl I. Lassey, a test pilot, was returning to Quonset Point, R. I., in his A-4 *Skyhawk*. As he tried to lower the landing gear, he discovered it had jammed in its housing.

LT Lassey had two choices: He could either fly the aircraft out to sea, eject and be picked up by waiting rescue units, or he could risk a hazardous wheels-up landing in an attempt to save the million-dollar aircraft. He chose the latter.

His choice set the fire and crash crews in motion; they covered a 1500-foot section of a runway with fire extinguishing foam.

Approaching the runway with minimum speed, LT Lassey eased the plane down and skidded 800 feet. A small fire broke out for a few seconds, but it was smothered.

The landing couldn't have been better, under the circumstances. There was no damage to the plane. An aircraft overhaul and repair official later said the aircraft would have been able to fly that same day if necessary.

Quonset's commanding officer commended LT Lassey for saving the government more than one million dollars and the fire and crash crews for their quick response and professional handling of the incident.

Kitty Hawk Overhaul

One of the Pacific Fleet's largest ships and the world's largest drydock are together in Bremerton, Wash., where uss *Kitty Hawk* (CVA 63) is undergoing major repairs on her hull, flight deck and interior. One project is to install a Naval Tactical Data Processing System.

As *Kitty Hawk* (1069 feet long) was floated into Puget Sound Naval Shipyard's 1180 foot-long drydock, she had 55 and one-half feet to spare at either end. This drydock facility, which covers 14 acres, is the only one on the West Coast large enough to adequately accommodate *Kitty Hawk* during her major overhaul period.

Due to the length of her yard period—approximately eight months—*Kitty Hawk's* home port has temporarily been changed from San Diego to Bremerton following her recent deployment to West Pac.

Space Age Carousel

The Navy is purposely getting men dizzy at Pensacola, Fla., by confining them in a space-age merry-go-round, called the Coriolis Acceleration Platform (CAP). This is a room 20 feet in diameter that rotates slightly faster than a conventional carousel, and is equipped so that men can spend days spinning around.

Four Navy volunteers who participated in recent experiments in the CAP are helping scientists at School of Aviation Medicine at Pensacola, Fla., study motion sickness. They spent 12 days going in circles.

CAP simulates the environment of a rotating space station and tests the ability of man to adapt his balance systems. Functions of the inner ear

TWO-TONED—This P-3 *Orion* is first of type with low visibility gray and white paint. All new production and reworked *Orions* are scheduled for the painting.





PLANE MODEL—This F-111 two-man tactical fighter, powered by two turbo-fan engines, is being developed for use by Navy and Air Force.

are being studied because astronauts are subjected to motion sickness caused by intense stimulation of this organ.

During the 12-day test the four officers—all future aviators who were chosen because of their low sensitivity to motion sickness—cooked, ate and slept in the perpetually revolving room. They spent most of their time reading and listening to recorded music.

During the first few days they experienced extreme discomfort and nausea. When the room finally stopped a psychologist tested the effect that the marathon rotation had on the men and observed the length of time it took them to recover.

They had overcome the earlier nausea, but were woozy and leaned to one side when walking. They regained their equilibrium within a few hours and overcame the other effects in a couple of days.

Another 12-day test is scheduled for a team of deaf persons. These subjects have lost the function of the inner ear and theoretically will not be bothered by the motion of the room.

This test will provide a basis for determining how much of the effects experienced by the officers was due to motion, and how much to boredom, fatigue, confinement and other factors.

With the United States' space program aiming at putting a man on the moon, the Navy's School of Aviation Medicine is hoping it can help make the trip no more uncomfortable than a car ride from Pensacola to New Orleans, and a lot more interesting.

Tracking Ships to MSTS

Missile tracking ships, previously assigned to the Air Force at Cape Kennedy, will now operate under the Military Sea Transportation Service (MSTS). Ten ships have been transferred, including the two large 13,000-ton C-4s USNS *General H. H. Arnold* (T-AGM 9) and *General Hoyt S. Vandenberg* (T-AGM 10).

The other eight included in the transfer are USNS *American Mariner* (T-AGM 12), *Coastal Sentry* (T-AGM 15), *Twin Falls* (T-AGM 11), *Sword Knot* (T-AGM 13), Rose *Knot* (T-AGM 14), *Coastal Crusader* (T-AGM 16), *Timber Hitch* (T-AGM 17) and *Sampan Hitch* (T-AGM 18).

Most of the ships will continue to operate in the vicinity of Cape Kennedy, Antigua, Trinidad, Puerto Rico and Ascension Island. However, *General Arnold* has changed its operating area to the Pacific.

Rushmore's Swimmobile

When USS *Rushmore* (LSD 14) sailors saw the big crane swinging a 20,000-pound swimming pool on board, they thought their Caribbean cruise would really be a trip to write home about. But alas, from some points of view, the pool proved to be only 20,000 pounds of good will, a part of Project Handclasp.

The swimming pool, dubbed a swimmobile, was en route from the Elizabeth City, N. J., YMCA to the YMCA of San Juan, Puerto Rico, where it was presented as a gift. The bright red Swimmobile is composed of a semi-tractor and trailer 35 feet long. The pool portion is 20 feet long, eight feet wide and four feet deep.

Rushmore also was scheduled to discharge 15 tons of medical supplies at San Juan and an assortment of chapel equipment. Both the medical supplies and chapel equipment were for later shipment to the Barbados.

For the Virgin Islands, *Rushmore* was loaded with school desks, chairs, text books, pencils, erasers, scissors and library books.

Also packed among *Rushmore's* goodies was an ample supply of rubber balls and chewing gum.

OILER USS Cimarron (AO 22) begins journey to sea for rendezvous with Fleet for underway replenishment. Her cargo capacity is over six million gallons.







NESEP STUDENT David F. Bolka graduated from MIT. *Left:* he puts oceanographic knowledge to use analyzing sea.

NESEP Navyman Earned Degrees for Work Ashore and Afloat

Three years of hard work and study paid off for Yeoman Second Class David F. Bolka, USN. Graduated recently from Massachusetts Institute of Technology through the Navy Enlisted Scientific Education Program he earned two degrees: a Bachelor of Science in Oceanography and a Master's in Geology and Geophysics.

Bolka already had some college behind him when he enlisted in the Navy. But he wanted more, so he decided to try for NESEP.

Entering MIT in September 1961, Bolka spent the next three years studying in an oceanography major. One of his most interesting senior year courses consisted of a three-month cruise aboard the Woods Hole Oceanographic Institution research vessel, *Atlantis II*.

During this cruise, Bolka stood a regular rotational oceanographics watch, which consisted in part of making bathythermograph observations and taking water samples from the surface to the bottom and analyzing them to learn more about circulation and water mass distribution. In addition to standing a regular watch, he assisted in the tedious work of the reduction of the data and the more interesting work of preparing charts of subsurface conditions in the ocean.

With the cruise taking place last winter in the North Atlantic, these observations were seldom easy, but Bolka joined in enthusiastically. One of his charts was used to determine the exact point at which the deep current measurements were made.

Upon completion of the cruise, one of the scientists claimed that in 18 years of oceanographic field work, he had rarely, if ever, seen such competence and diligence both as a watch stander and a member of the scientific program as a whole.

Bolka is now attending Officer Candidate School, Newport, R. I., and will be commissioned as an ensign, USN, in February 1965. He then will report to the Submarine School at New London for duty under instruction.

The NESEP unit at MIT, in its six years of existence, has had 20 enlisted personnel enrolled. Eight have graduated so far with majors in aeronautical engineering, nuclear engineering, electrical engineering, nucleonics, physics, mechanical engineering, oeanography, geology and geophysics.

This is not the first such success story; it's been repeated many times over in 22 colleges and universities throughout the country.

Full information concerning the NESEP can be obtained by reading BuPers Instruction 1510.69H. See your personnel officer.

Never A Dull Moment

Most men on board uss *Bainbridge* (DLGN 25) would agree that entertainment on board is something less than that promised by most round-the-world cruise ships, but then *Bainbridge's* 30,000-mile cruise around the world without refueling or replenishing her supplies is no ordinary voyage.

Nevertheless, *Bainbridge's* men don't lack for entertainment during their off-duty hours. There is a well-stocked library on board containing about 1000 books on subjects which range from popular fiction to reactor technology.

When the *Bainbridge* man gets tired of reading, he can listen to a wide range of music piped to the ships' living spaces via closed circuit radio.

Radio stations in *Bainbridge's* home port (Charleston, S. C.) tape selected broadcasts and mail the tapes to *Bainbridge*. Many of the crew members have heard songs played just for them at the request of their wives or sweethearts. Live broadcasts are presented by the crew. Movies are shown 21 times a week.

There are also those old Navy standbys such as acey-ducy, poker, chess and other table games provided by the ship's welfare and recreational fund and Saturday night is bingo night on the mess decks.

Any man, of course, who wants to concentrate on improving himself through the Navy's educational facilities, the U. S. Armed Forces Institute or the country's leading colleges and

universities has an opportunity to do so through correspondence courses.

If the *Bainbridge* man still finds time on his hands, he can use his own ingenuity or simply turn out his bunk light and go to sleep.

Nice to Have You Aboard

Two submarines of the Japanese Maritime Self Defense Force trained with U. S. submariners at Pearl Harbor during this past summer. They were JMSDF *Wakashio* and JMSDF *Hayashio*.

Each of the Japanese submarines is 120 feet long, displaces 740 tons and carries a crew of 28 men and six officers.

During their training cruise, the Japanese submariners learned from U. S. Navymen the techniques of escape from a disabled submarine by making 50-foot ascents through the water of the submarine base escape training tank.

The Japanese crews also sought aggressor ships and snorkeling enemy submarines under conditions simulating actual combat.

Before leaving Pearl Harbor, the Japanese submariners conducted ceremonies at the Submarine Memorial and placed leis on the 52 bronze plaques commemorating U. S. submarines lost during World War II. They also made an official visit to the *Arizona* Memorial.

Situation Well in Hand

A Battalion Landing Team of Sixth Fleet Marines hit the beach at Porto Scudo, Sardinia, as part of training exercise MEDLANDEX 4-64. The Marines had a complete workout, operating on rugged terrain and firing organic and supporting weapons.

The 10-day training period began with landing craft, amphibious tractors and helicopters moving from ship to shore.

Once the Marines had landed and secured their objectives from previously landed defending forces, Marine construction details went to work on small arms ranges building stationary and pop-up targets.

Those who weren't working on the ranges were out in the mountains taking part in squad and platoon size tactics.

When the Marines weren't actually shooting their weapons, it was an almost sure bet they could be found standing weapons inspections, hiking, studying tactics or climbing mountains.

On the last day of the exercise, the Marines invited Italian and German as well as U. S. personnel to observe a special fire power exercise.

The show began with a rifle squad. Each member's position was explained to the visitors and each man displayed his weapon; then fired it at a simulated enemy.

After the rifle squad demonstrations came exhibitions using heavier weapons which required crews to operate the mechanized weapons.

Naval gunfire was called in on a target across the bay from the observers and close air support demonstrated the relationship between aircraft and infantry in an assault.

After a short break for supper, the Marines produced their grand finale with weapons completing a fire assignment using tracer ammunition. Special illumination was furnished by the team's 81-mm mortar platoon.

—T. D. Ellis, SSgt, USMC.



TWO JAPANESE Maritime Self Defense Force Submarines, *Hayashio* and *Wakashio*, moor at Pearl Harbor during training period with U.S. submarines.

BIG ONE—Recently commissioned *USS Stonewall Jackson* (SSBN 634) is one of largest subs ever, measuring 425 feet.







MORTON STEAMS in Pacific *(left)*. "Goat king" and "goat officer" *(right)* fit Downwind with life preserver.



DOWNWIND stands duty on Morton bridge. The goat polices the area daily for cigarette butts.

Little Buttinsky Wins Morton's Heart

How do you get a hoofprint on an ID card?

This and other such questions have troubled crewmen of the destroyer USS *Morton* (DD 948) since Downwind, their goat mascot, reported aboard in May.

Downwind, a San Clemente Island native, was brought to the ship by helicopter after efforts by *Morton* men to catch a goat on foot were unsuccessful.

The goat has adapted to shipboard life with the ease of an ancient mariner, and now goes about his duties like an old salt.

A "goat officer" has been assigned to parade Downwind during highline transfers and underway replenishments, and to act as the goat's official spokesman. He also oversees three "goat kings," who assist Downwind in personal care, quarters upkeep and exercise.

Downwind has quarters in a hot shell casing basket behind the forward gun mount, but prefers to spend his free time on the bridge with the commanding officer, Commander T. G. Slattery. At first the reason for the preference was thought to be command instinct, but has since been attributed to the fact that the bridge is heated at all times.

—Reg Hardy, JOSN, USN

No Drought in Gitmo

At Guantanamo Bay, Cuba, the second water desalinization plant has gone into full-scale operation. The first two plants can produce a total of one and one-half million gallons of water per day.

A third plant, scheduled to begin operation in December, will furnish an additional 750,000 gallons daily.

Also in December, the first of two 7500-kilowatt electric generators should be on the line. When the second generator is installed in March of next year the base can shut down some 17 smaller, diesel-driven generators scattered throughout the area.

The water desalinization plants and electric generators are part of the effort to make Gitmo self-sufficient. The self-sufficiency policy was decided upon last February when the Cuban government stopped the flow of water from the Yateras River water plant to the U. S. Naval Base.

Before the installation of the water plants, two MSTS tankers were delivering water to the isolated base from Ft. Lauderdale, Fla. About August 15th, after the first plant began producing at full capacity, one of these tankers was pulled from the shuttle run. The other was released when the second plant went into operation.

Missile-Testing Ship

The veteran missile-testing ship USS *Norton Sound* (AVM 1) is back in commission after a 19-month yard conversion in Baltimore. She is now equipped to resume her role as a floating proving ground, and will begin testing the new shipboard weapons control system (SWCS) developed for the *Typhon* missile.

SWCS employs advanced microwave and digital computer techniques, along with a single high-powered radar array, to provide long distance air defense against a number of targets simultaneously. It is designed to search more than 100 miles distant for approaching enemy aircraft, track them when they are discovered, then guide a missile attack all the way to interception.

The *Typhon* missile was conceived to provide a quick reacting system against multiple targets by integrating the search and weapons control function for a family of missiles. It is an extremely complex system.

Norton Sound's conversion after 12 years of missile testing—which included work in the development of *Polaris*—has afforded her with the increased capabilities required to perform as a complete missile system test facility for this new program.

Four Sets of Wings

But for Navy Uniform Regulations Lieutenant (jg) Peter G. Murray might well spend his time pinning on wings. He has earned four sets in his six years in the Navy.

The regulations allow personnel to wear only one of a kind of similar or related insignia, except for combat insignia. Hence, Murray may wear only the wings of Naval Aviator and Navy parachutist, although his record also shows him to be a qualified enlisted Aircrewman and Basic Parachutist.

Murray earned his Aircrewman's wings as a Naval Reserve aviation electronics technician while attending college. The second set, those of a Naval Aviator, he donned after flight training at Pensacola in 1962.

The young officer received his Basic Parachutist wings next, although the groundwork for them was laid when he took his initial jump in California at the age of 17. This set of wings came after he completed the Army Airborne Jump School at Fort Benning, Ga., early this year.

Arrangements were then made for his participation in jumps with the Marines at Camp Pendleton, Calif. After logging jumps with full Marine combat gear, Murray received the gold Navy Parachutist wings and became one of the few Navy officers to be designated both a naval aviator and Navy Parachutist.

As a pilot, Murray has also obtained a commercial pilot's license, logged over 600 hours in Navy S-2 *Trackers* and is looking toward a future as a jet pilot.

LOTS OF WINGS—LTJG Peter G. Murray displays four sets of wings earned during his six years in the Navy.



But, as both pilot and parachutist, Murray has firmly resolved to keep the two skills separate.

All Are Beautiful

Beauty queens and Navy warships aren't related except by gender. But when the two are brought together it is a case of mutual admiration. This was again the case when 12 of 21 semi-finalists of the Miss Jacksonville Beauty Contest visited the attack carrier uss *Shangri-La* (CVA 38).

Using one of the elevators as a stage, the contestants sang and danced for the crew.

Four days after the visit, members of *Shangri-La's* crew assisted as escorts in the final competition. Dressed in dress white uniforms, the escorts presented the girls to the judges and audience and led them to their positions on stage. As far as *Shangri-La's* crew was concerned, all the ladies were winners.

Time For a Breather

Nearly nine years ago the Navy accepted the 71st shipment of T34B *Trainer* aircraft. And that began No. 158's tour of duty.

During those years, the single-engine plane has logged more than 6000 flying hours and approximately 36,000 landings. Through it all, 158 has kept a perfect record—never even a dent. Of course, minor repairs were necessary (as with any other machine) to keep it in good running order.

The little plane began her Navy career at NAS Pensacola; since then, she's been transferred to NAAS Whiting Field and finally to NAAS Saufley Field (both auxiliary air stations are near Pensacola).

What's next for her—retirement? Eventually, but not for quite a while. Shortly 158 will receive an overhaul; when she emerges, she'll again take her place on the line.

Acorns Meet Dolphins in New Environment

A new field has opened and somebody had to be first in the program. Consequently, Lieutenant John E. Greenhalgh, SC, USN, now wears dolphins of a new design. He is the first Supply Corps officer to earn them.

The new program offers an opportunity for supply officers to qualify in submarines. Although some other Supply Corps officers now wear dolphins, they earned them as line officers before switching to the SC. And their dolphins are of a different design (the standard twin dolphins flanking the bow of a submarine).

LT Greenhalgh's insignia, authorized this year, is twin dolphins flanking the Supply Corps emblem—a gold leaf with acorns.

To qualify, LT Greenhalgh completed the basic officers' course at Submarine School, New London, Conn., and served aboard uss *Lafayette* (SSBN 616) where, in addition to his supply duties, he stood diving officer and officer of the deck watches under instruction. He completed two *Polaris* patrols. His present billet is assistant supply officer for submarines on the staff of DEPCOMSUBLANT.

The field is open to any SC officer with an above average academic record and an aptitude for math, who can pass the submarine physical.

If selected, he will be ordered to the six-month course at sub school (this requirement can also be satisfied by receiving comparable indoctrination for six months aboard an active submarine). Then he must complete a year's service on a submarine force, flotilla or squadron staff, or in a ship or station where his primary duties involve direct support of operating submarines. He must also prepare a thesis, and be recommended by his Commanding Officer.

A FIRST—LT John E. Greenhalgh, SC, USN, receives Supply Corps dolphins from RADM John A. Tyree, Jr., Deputy Commander, Sub Force, Atlantic Fleet.



New Supply Corps Dolphins





FAMILY RE-UP—Chief and Mrs. Robert Roberts reenlist together aboard *USS Willis* (DE 1027), the chief's ship. *Willis'* CO gave them the joint oath.

Music School Move Is a Hit

One way to move 43 string basses, 500 saxophones, 60 sousaphones, a slew of pianos and a harp, plus the rest of the Navy's School of Music, is to call in a couple of LSTs. This was proven when such a move was made recently, transferring the School of Music from the cramped quarters it occupied in Washington, D. C., for the past 29 years, to a specially tailored building at the Naval Amphibious Base, Little Creek, Va.

Now the student musicians have more room to study and practice—and where 500 saxophones are involved, space can be an important factor. Since the School trains musicians for the Army and Marine Corps, as well as for the Navy, it was just about busting out of its spaces in Washington's Anacostia section. The student quotas are set at 250 for the Navy, 250 for the Army and 20 Marines.

To handle this enrollment, the Washington spaces provided 45 instruction rooms, which the students used at night for private practice rooms.

At the new quarters, a renovated and virtually rebuilt barracks in Little Creek, they have 64 soundproofed, individual private rooms and 62 instruction studios, air-conditioned (for a nice change), and consolidated (another improvement over the spread-out Washington complex).

Packing up for the move was not an easy chore because the students maintained their instruction schedule as much as possible during the period, besides continuing to participate in the never-ending after-hours obligations placed on them in the nation's capital. Not a week passes in Washington without Navy musicians being called out for some major function, be it ceremonies for a visiting head of state, a public concert, a funeral at Arlington National Cemetery or a White House party.

School plays an important part in the career of a Navy musician. Although he has already had several years of instrumental instruction before being accepted into the program, his first assignment in the Navy is to the music school's six-month basic course to study harmony and theory, ear-training, and sight-singing, to rehearse concert and dance band music, and to receive private instrumental lessons.

Later in his enlistment, as a petty officer, he returns to school for a six-month refresher course. Then, as a

Retiring Navy Veteran Recalls Pearl Harbor

A veteran of the Pearl Harbor attack retired from the Navy recently after serving continuously for more than 30 years. He is Lieutenant Commander H. R. Davis, Supply Officer for the Military Sea Transportation Service at Gulf Subarea, New Orleans.

In a brief farewell talk, LCDR Davis recalled his most vivid memory of his career—the attack on Pearl Harbor, 7 Dec 1941.

Then a storekeeper first class, he was aboard the battleship USS *California* (BB 44)—the first in Battleship Row moored alongside Ford Island. He had just finished breakfast and went to his office to finish some work and decide how to spend a quiet Sunday.

As he turned to his work, he heard several explosions at the Naval Air Station, Ford Island. He peered out the porthole; the sky was filled with planes. He could even see the rising sun painted on the bottom of the wings.

General quarters was immediately sounded aboard *California;* the clanging alarm on the 97 other ships echoed throughout Pearl Harbor as if one hand had simultaneously pulled the alarm on each.

LCDR Davis was a telephone talker at his battle station, which was in an ammunition supply line below decks on the starboard side—the side facing Ford Island. A few days before his GQ station was on the opposite side of the ship.

California, leading a line of seven battleships, sustained three torpedo hits within minutes. One hit killed the entire ammunition supply party on the port side—from which he was transferred just days before.

The torpedo hits and other devastating blows by enemy dive bombers severely wounded *California,* and she settled where moored.

Overcome by smoke and escaping gases and suffering from internal injuries, LCDR Davis became unconscious at his battle station. He was carried topside where he regained consciousness. When word was passed to abandon ship, although wounded, he carried one of his shipmates through the burning ship and placed him into a motor launch which was shuttling the injured to makeshift hospitals. He was in the hospital two weeks recovering from his wounds.

Throughout the remainder of World War II, he served in the Pacific. During the entire Korean conflict, he was in the combat area with a landing ship squadron.



RENOVATED BARRACKS at Little Creek, Va., is now school building for Navy, Army and Marine musicians.

PO1 he must complete the one-year advanced course to be eligible for advancement to chief.

In its new location, the school will be able to handle its expanding student body and do a better job making better musicians.

They Shall Have Music

Wanted: music. So the destroyer USS *Robert L. Wilson* (DD 847) searched her crew and came up with a chief engineer, assistant communicator, assistant navigator, damage control assistant, signalman, fire control technician, radarman, torpedoman, storekeeper and quartermaster.

This happened shortly after *Wilson* received a FRAM I conversion at the Philadelphia Naval Shipyard.

During evenings, crew members who had instruments aboard would get together for a jam session. Then Ensign L. K. Smith reported aboard. He used his musical background to organize the band and called rehearsals as often as possible to provide entertainment for an upcoming four-month Mediterranean cruise.

Soon the band was presenting impromptu concerts in Italy, Greece, Turkey and Spain.

The band worked out an hour's repertoire, from marches to rock 'n roll.

While he conducted, ENS Smith also filled in with a few notes on the piccolo. Signalman second class Joseph Davis, the band's most versatile musician, filled in on the trumpet, saxophone and drums, or sang a chorus or two when the need arose. Even the captain, Commander K. W. Cavitt, who has an ear for music, found himself sitting behind the drums during several of the impromptu sessions aboard ship.

During highline transfers and refuelings, the band added background music. Mindful of the signs on fleet oilers that give the number of ships that have been alongside during the year, *Wilson* came up with one of her own. In sending greetings to the oiler, the sign read, "Hello Oily, you are number — alongside this cruise," while the band played a chorus of "Hello Dolly."

From the Twist to Flamenco

The naval base at Rota, Spain, came up with a winning combination for an open house—an American state fair and a Spanish *feria*. Attracting more than 50,000 visitors, it was the best open house and carnival in Rota's seven years as a joint naval base.

There was plenty of dancing. *Senoritas* joined their American friends for square dancing. Others formed several groups to sing and dance *flamenco*.

Everyone's eyes turned skyward for the carnival's highlight. Climbing to an altitude of 12,000 feet, the Torrejon Skydiving Team jumped from their aircraft. As they free-fell, they performed their tricky and thrilling maneuvers to the delight of the thousands below.

Musical programs were far from lacking. While the station band conducted a concert of light classical music in the center of the carnival grounds, a troupe of 30 *flamenco* dancers and singers performed before large audiences.

In addition to the many groups improvising their own dancing and singing, the distinctive sound of twist music, Spanish style, could be heard from the *USS Holland* (AS 32) and the Navy's Acey-Ducey Club.

MUSIC MEN—Crew members of Destroyer *USS Robert L. Wilson* (DD 847) swing out on deck. They have been giving concerts in port while on cruise in Med.



SERVICESCOPE

Brief news items about other branches of the armed services.

AN AIRCRAFT designed for support of counterinsurgency and limited war operations is under development.

As an airborne equivalent of the jeep, it will have the military capabilities of light armed reconnaissance, helicopter escort and attack, and support of ground troops. Its peacetime emergency functions will include disaster relief, medical missions and riot control.

With twin turboprop engines of the 600-horsepower class, the aircraft will be able to take off over a 50-foot obstacle in less than 800 feet with a 1200-pound ordnance load and three hours of fuel. Where longer takeoffs are possible, the aircraft should be able to carry a 3600-pound ordnance load.

In addition it will operate from rough clearings, primitive roads and waterways as well as prepared airfields and aircraft carriers.

Plans call for a maximum level flight speed of 275 knots for helicopter escort. The minimum speed (less than 100 knots) will be used for jungle search.

The Marine Corps made the initial request for a light armed reconnaissance aircraft; later the Air Force confirmed the need. The Marine Corps supplied the specifications for the counterinsurgency (COIN) aircraft.

The Navy, designated by the Department of Defense as the developing agency, will have seven built at Columbus, Ohio.

Before production begins, however, an extensive joint service flight evaluation program will be conducted. The design concepts will be compared with the capabilities of other types of counterinsurgency aircraft now in use.

★ ★ ★

TWO CHIMPANZEES, Louie and George, have demonstrated their mental agility at Andrews Air Force Base, Md., for the annual Air Force Association Convention.

Both chimps had undergone schooling in manual and mental tasks at the 6571st Aeromedical Research Laboratory, Holloman AFB, N. Mex. During the three-day convention, Louie and George performed exactly as they did for research programs back in Holloman.



SPECIAL DELIVERY—Parachute Low Altitude Delivery System (PLADS) pinpoints 1000 pounds of Air Force cargo.



ARTILLERYMEN prepare to load howitzer in Army CH-47A *Chinook* helicopter, which carries three-ton payload.

Association members saw two performances. Louie completed a tracking task that involved both mental and manual dexterity. A circle of light moved across a scope while the chimp attempted to keep a cross in the circle's center by operating a lever. If the chimp failed to keep the cross within the circle, the system registered "tilt" and he had to begin again.

George's job was to count. A number flashed above a right-hand lever; the chimp pressed it as many times as the number indicated, after which he pushed the left-hand lever. Each correct combination produced food for George.

Louie and George are two of 83 chimpanzees in the Holloman colony—the world's largest.

★ ★ ★

NOW IT LOOKS as if we'll have a new, fast method of establishing anchorages, thanks to the Army, which has come up with an explosively driven anchor. The new experimental device will enable coastal towns without harbor facilities to benefit directly from sea trade.

The advantages of this new system over conventional methods of establishing an anchorage include substitution of a 3300-pound anchor to do the job of an anchor system weighing almost 17 times as much. The trick is that the Army's lighter anchor is able to shoot itself deep into the sea floor by means of an explosive device.

The system is especially designed to accommodate tankers, which can be moored off-shore and pump fuel to storage tanks ashore through underwater pipelines.

As the six- by four-foot steel casting is lowered to the bottom, an impact fuse sets off an explosion. In tests the explosion has driven the anchor about 35 feet into the sandy seabed or 20 feet into coral formations.

A mooring buoy is then attached to the embedded anchor's connections.

Once established, the anchorage can be abandoned simply by severing the buoy's connections, leaving the anchor in place. The low-cost device is considered expendable.

Using this system, tankers up to 70,000 tons can be moored, even during severe sea conditions, because as

many as eight anchors can be used to secure one large buoy.

And it can all be done in three days instead of the approximately three weeks it would take using present methods, at considerably less cost.

★ ★ ★

THE ARMY MEDICAL SERVICE is altering the composition of its flu vaccine. Two strains of the virus responsible for recent influenza outbreaks in Maryland and Japan have been isolated, and will be substituted for two others which have been in the vaccine for years. Administration of the new vaccine will commence for all service personnel and their dependents in the near future.

★ ★ ★

THOSE WHIRRING, grinding giant robots popularized on the late late late show may be nearer to reality than the skeptical, bleary-eyed viewer might think. A current Air Force project is aimed at determining if one such "monster"—weighing 11 and one-half tons, with tank treads, two 19-foot-long arms and "vision"—can satisfactorily perform recovery and salvage work in radiation contaminated areas unsafe for humans.

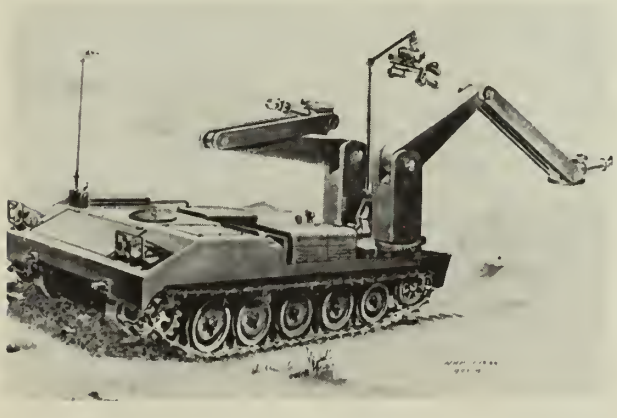
As yet unnamed, the robot is a vehicle that can be radio-controlled from a remote van. Four transistorized television cameras serve as the eyes.

When fully extended to 19 feet, the arms, which are designed to simulate the movements of human arms, can lift 600 pounds each. The hands have a grip force of 3000 pounds—enough to crush a diamond—yet are dexterous enough to turn bolts and operate a cutting torch and a variety of power tools.

The operator moves the arms by manipulating control sticks, which transmit radio signals to the vehicle. The operator can extend, retract, twist and turn the arms and operate the hands. He can also start, stop, turn and reverse the vehicle.

Movements are so perfected, and depth perception is so good, that the operator—located in his van a mile away—can make the robot pick up a pencil.

Manned, the vehicle has a top road speed of 40 mph. Its unmanned radio-controlled speed is about 10 mph, and the vehicle can be transported by air.



TEST BED VEHICLE will help Air Force determine feasibility of unmanned, radio-controlled vehicles in radiation areas.



DOUBLE DUTY—Model shows USAF version of F-111 two man tactical fighter that will also be used by the Navy.

EVERYBODY KNOWS a little goes a long way but who would suspect that a mylar disc only one-eighth by ten-thousandths of an inch could gouge a crater one-eighth of an inch deep in an aluminum block after traveling only seven inches?

This is what happened in a series of experiments conducted at Wright-Patterson Air Force Base, Ohio. The purpose of the experiments was to judge the effect of a meteoroid on a space ship.

The outer surfaces of spacecraft are extremely vulnerable to abrasion and puncture by meteoroids which range in size from fine dust particles to objects the size of marbles.

The materials under fire by the laboratory meteoroids in the series of tests at Wright-Patterson were stainless steel, copper aluminum alloys, lead, plastic, foams, fibers and self-sealing materials.

★ ★ ★

A ONE AND ONE-HALF horsepower engine has used ammonia as fuel for 35 hours without a breakdown during tests at the Army's Engineer Research and Development Laboratories, Fort Belvoir, Va.

The tests are part of the Army's Mobile Energy Depot (MED) concept which utilizes nuclear energy to make emergency fuel from native elements for field use. They will determine the minimum modifications required for an engine to operate with substitute fuels.

Changes on the engine working successfully on ammonia include replacing the magneto ignition with a battery and modifying the distributor to advance the spark 40 degrees.

Development of the MED concept is underway by three government agencies: the Atomic Energy Commission is responsible for the nuclear power plant; the Advanced Power Conversion Development Branch of the Corps of Engineers Nuclear Power Field Office is working on methods of converting natural elements, such as hydrogen and nitrogen, into fuel; and the Engineer Laboratories are determining the engine modifications required to utilize the substitute fuels.

The goal is to reduce the tonnages of petroleum products necessary to support field armies.

THE WORD

Frank, Authentic Career Information Of Special Interest—Straight from Headquarters

• EARLY OUTS FOR XMAS—Enlisted men and women who are due to be discharged or separated between 18 Dec 64 and 4 Jan 65 are eligible for separation before the start of the holiday season. Commanding officers have been given authority to separate (or transfer in time for separation) between 14 and 18 Dec.

Orders for Naval Reserve officers being released to inactive duty during December and January have been written to provide for their early separation, should they so desire.

As in past years, all early releases are subject to the approval of commanding officers. Navymen *not* eligible for early separations include Reserves undergoing active duty for training, personnel considered essential to the operations of the command, men being transferred to the Fleet Reserve or Retired List, and aliens seeking to qualify for U. S. citizenship by completion of three years' active military service.

Additional information may be found in BuPers Notice 1900 of 12 Oct 64.

• 1600 NEW CHIEFS—Approximately 1600 PO1s who went up for Chief last February will be doffing their white hats in favor of the CPO variety. They are being advanced in two increments, the first of which—and the largest—occurred in November. The advancement-to-CPO statistics show that 972 were advanced in the first increment while 635 will put on the hat the 16th of January.

Don't lose all hope if your name didn't show on either increment. You still have a chance. The number advanced in January will be more than the 635 presently shown.

Incidentally, when it comes time for you to go up for E-8, your final multiple will be computed as if you had been advanced on 16 November.

• E-7 EXAMS FOR WO CANDIDATES—BuPers has issued a reminder that all PO1 candidates for warrant officer must participate in the E-7 exam in February unless they have already received authorization for advancement to chief.

Apparently there is some confusion on this point, owing to a misinterpretation of BuPers Inst. 1120.18J. This is the Instruction concerning in-service officer procurement under the Integration, Warrant Officer and LDO programs.

The Instruction states that all PO1s who are candidates for warrant officer must complete all performance tests, practical factors and training courses for the next higher rate, and must successfully pass the E-7 examination given in February following application. It further states that those whose advancement to chief petty officer has been authorized, and whose authorization for advancement is on board, need not participate in the February E-7 exam.

This means that the E-7 exam requirement for the warrant officer program is not fulfilled unless the candidate has actually been authorized for advancement to chief, even though he may already have taken the examination for grade E-7.

In short, every candidate for warrant officer must take the February E-7 exam except those who are already E-7, E-8 or E-9, or whose authorization for advancement to E-7 is on board.

BuPers Notice 1120 of 13 Oct 1964 clarifies this point.

• EDUCATIONAL FUND—Navy families who are exploring ways and means of financing Junior's college education can taper off on their worrying.

The Navy Relief Society has established an educational fund to send dependent children of Navy or Marine Corps personnel to accredited colleges, vocational training schools, preparatory schools or service academies if their families need such assistance.

The educational fund will borrow two million dollars from Navy Relief Society reserve funds and will lend up to $1000 for each year to qualified young people up to four years (or a total of $4000). No interest will be charged.

The students are to repay the loans in installments beginning three months after graduation or departure from school.

Dependent children to the age of 22 may apply for the assistance, which will be granted on the basis of need. Eventually the fund is expected to become self-sustaining—something on the order of a rotating fund.

Should an emergency arise, applications will be considered for students who started their higher education in the fall and need assistance in order to finish the term. Most applicants, however, will probably be interested in seeking loans to begin the 1965-66 academic year. Regulations governing scholarship awards for the 1965-66 academic year will be available before 1 Jan 1965.

Application forms for educational assistance may be obtained from the



BE A GOOD SQUID—Remember that ALL HANDS is meant for 10 Navymen, so pass it on to those who are waiting.

Navy Relief Society, 1030 Munitions Building, Washington, D. C. 20360. The deadline for submitting applications for assistance during the fall 1965-66 semester is 1 Apr 1965.

• RETENTION—Some commanders and lieutenant commanders who would normally be released, retired or reverted to enlisted status by 30 Jun 1965 will be selected to continue their active service as officers until 30 Jun 1966.

This decision was made because of anticipated critical shortages of officers in certain codes. Here's the way it will work.

• Reserve commanders (except TARs) in critical codes who are eligible for retirement and who have failed promotion two or more times may, if selected, be retained until 30 Jun 1966.

• Reserve commanders and lieutenant commanders (except TARs) in critical codes who are eligible for retirement and who have not failed of selection two or more times may also be selected for retention until 30 Jun 1966.

Officers in both these categories will be notified as soon as possible whether or not they will be retained.

• Reserve commanders and lieutenant commanders (except TARs) who are not eligible for retirement, but who have failed of selection for promotion two or more times, may expect to remain on active duty until 30 Jun 1966—and possibly longer—unless they are individually notified to the contrary at least four months before their scheduled release dates.

TAR lieutenant commanders and above:

• Who attained retirement eligibility in fiscal year 1965, as well as those previously continued through fiscal year 1965, were considered by the FY 1964 TAR board for further retention on active duty. Those to be retained have been notified.

• Who attain retirement eligibility in FY 1966, including those previously continued through FY 1966 will be considered for retention by the 1965 TAR board and notified of their retention by May or June 1965.

Temporary commanders and lieutenant commanders in critical codes:

• Who have failed of selection twice or more may also be retained unless their earlier reversion or retirement is required by law.

Normally, however, temporary commanders will not be retained after 30 June of the fiscal year in which they complete 26 years of commissioned service (20 years for lieutenant commanders) or 30 years of active service—whichever comes first.

All officers in this category will be notified, at least four months in advance of their scheduled reversion or retirement dates, of their selection or non-selection for retention.

Full details may be found in BuPers Notice 1920 of 9 Oct 1964.

• MOBILE HOME TRAVEL ALLOWANCES—Maximum allowance for the transportation of house trailers has been increased from 36 cents per mile to 51 cents. The total cost of transportation, however, cannot exceed the maximum allowance for transportation of household goods plus the dislocation allowance.

The 51-cent allowance only applies if the moving is done by a commercial transporter, though it makes no difference whether arrangements are made by the Navyman or the Navy. However, such arrangements may be made by Navymen only when they have been authorized to do so.

Transportation of house trailers has also been authorized between CONUS and Alaska. Navymen who receive permanent change of station orders to other points outside CONUS, however, are only allowed house trailer transportation to the point of embarkation.

There have been no changes in eligibility requirements for house trailer transportation. Additional information may be found in Navy Compt Notice 7220.

• NATURALIZATION BENEFITS FOR KOREAN VETS—Aliens who served honorably in the U. S. armed forces during the Korean conflict are eligible for naturalization, providing they have enlisted or reenlisted in the United States. It is not necessary for them to have been lawfully admitted to the U. S. for permanent residence.

The Korean conflict period began on 25 June 1950 and ended on 1 July 1955.

Eligible aliens who wish to become U. S. citizens should file applications at the nearest District Office of Immigration and Naturalization in the United States. Assistance and advice in doubtful cases may be obtained from any law specialist or the Judge Advocate General of the Navy.

HERE'S YOUR NAVY

Anyone who has clicked a floshlight switch in vain knows o bottery can die of sheer disuse. Of course, if it's only a floshlight battery, no particular horm is done. You simply buy another.

On the other hand, if the bottery is in a missile fuse system and doesn't wark, the results are somewhot more seriaus.

The Novy found it needed a new kind of chemaelectric energy conversion system in a battery that could be assembled in on inactive stote, stored indefinitely without deteriorating ond remain inert until needed.

The answer seemed to be in the use af ammonia cells for use in reserve batteries but the problems roised in the development of on ammania battery were so numerous the project wos neorly dropped.

Eventually, however, the need for an impraved battery became sa great that the Navol Ordnance Labaratary, Corono, Colif., jained farces with industry and produced a prototype for a new 11-watt, multiple section, liquid-ammania reserve battery.

The men working on the project knew precisely whot they wanted—a bottery copoble of activating within one second which would remain aperative within five per cent valtage limits for three minutes.

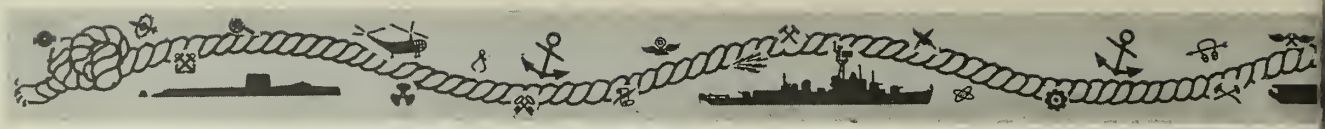


The bottery would have to occupy a space of less than six cubic inches and be able to withstand shack ond vibration. The prototype of NOL's liquid ammonia bottery nat only met all the requirements but added a few features of its own. For instance, the new battery is not anly small but its cells can be seporated from one another and located in a number of places while still being served by one centrally located activator.

The NOL prototype should alsa pleose budget men as well os it pleoses missile men for it represents higher quality at lower cost.

Even the first relatively primitive madel can pravide a tenfold increase aver thermal batteries that are now being produced far similar opplicotions.

As time gaes by, the Navy can expect ta see its little prodigy develop inta more sophisticoted, higher energy reserve botteries.



TAKE A CHECK

THERE WAS A TIME when having an NEC meant very little to a Navyman, to his command, or to an assignment officer. With a few exceptions any man qualified for his rate could perform the duties of any billet calling for that rate. Today, this is becoming less and less true.

This is no reflection on the men in today's Navy—they're better than ever. It's just that jobs, in all fields, have become more complicated. Already about one out of five Navy enlisted billets requires not only a man in a specific rating, but with a specific NEC (Navy Enlisted Classification) as well.

The real crux of the problem is that we are living in the era of electronics, nucleonics, supersonics and specialization. Although the Navy must have petty officers who are versatile, highly trained specialists are also in great demand. Those in the latter category carry one or two NECs.

There was a time when any Navyman who qualified for an NEC could hold it, regardless of his rating. But detailers ran into complications when, for instance, they tried to assign a signalman who had a radioman's job code. And, when the planning people tried to compute how many Navymen should be trained for a sonarman's NEC, they didn't quite know what to do about the BMs and RMs who already carried the NEC. And if they did count men in other ratings, could these men be detailed to sonarmen's billets? It was all very confusing.

Consequently, the "source rating concept" was developed. Under this new system, most NECs are limited to men in a certain rating, or in a few cases several specified ratings. There were two reasons for this: Number one, the Navy wanted to derive the greatest advantage from its training programs—which meant training only those men who would actually *use* their skills. Second, it was necessary to provide a single system of bookkeeping (rates subdivided by NECs) which could be used when detailing personnel. Under the old system, detailers could make assignments according to rating or NECs, but it had to one or the other.

Either key NECs had to be tied more closely to ratings, or they would more than likely supplant ratings. That's the idea of the source rating concept—to tie the key NECs and the ratings closer together.

The source rating concept could not be applied to *all* skills, however, for some skills could not be tied down to one or two ratings. Take divers, for instance, or aircrewmen. Under the new system these skills are listed as special series NECs and may be held by any rating. They are assigned as secondary NECs and have a high priority in coding.

NEC	FUNCTION	SOURCE RATINGS
• BOATSWAIN'S MATE		
8M-0107	Minesweeping	BM
8M-0113	Net Rigger	BM
8M-0161	Tugmaster	BM, QM
8M-0162	Boat Captain, Yard Craft	BM, QM
8M-0163	Boat Captain, Minesweeps	BM, QM
8M-0164	Assault Boat Coxswain	BM
• QUARTERMASTER		
QM-0215	Harbor Pilot	QM, BM
QM-0221	Inertial Navigation Operator	QM
• RADARMAN		
RD-0313	Air Intercept Controller	RD
RD-0314	Air Intercept Controller (Supervisor)	RD
RD-0316	Antisubmarine Air Controller	RD
RD-0317	NTDS Input/Utilization Display Equipment Operator	RD
RD-0318	Air Intercept Controller, NTDS	RD
RD-0319	Air Intercept Controller, NTDS (Supervisor)	RD
• SONAR TECHNICIAN		
SO-0406	Underwater Object Locator Repairman, AN/UQS-1	STG
SO-0407	Sonar Technician, AN/SQS-23	STG
SO-0408	Underwater Object Locator Repairman, AN/SQQ-14	STG
SO-0409	Submarine Sonar Technician, AN/BQG Series	STS
SO-0411	Oceanographic Specialist	ST
SO-0414	Submarine Sonar Subective Analysis Technician	STS
SO-0415	Submarine Noise Measurement and Sound Analysis Operator	STS
SO-0417	Sonar Technician AN/SQS-268 (EDO)	STG
SO-0418	Sonar Technician, AN/SQS-26AX	STG
SO-0422	Sonar Technician, AN/SQR-13 (PADLOC)	STG
SO-0423	SSN Integrated Submarine Sonar System Technician	STS
SO-0426	SSBN Submarine Sonar System Technician	STS
Underwater Fire Control Systems Technician		
SO-0471	Mk 111 *(Asroc)*	STG
SO-0474	Mk 114 *(Asroc/SQS-23)*	STG
SO-0475	Mk 114/Mod 9 *(Terrier/Asroc)* AN/SQS-26AX	STG
SO-0476	Mk 102	STG
SO-0477	Mk 114/Mod 9 *(Terrier/Asroc)* AN/SQS-268X	STG
SO-0478	Mk 105	STG
SO-0479	Mk 105/Mod 28 (Mk 37-1 Torpedo System)	STG
SO-0481	Mk 114 *(Asroc/SQS-26AX)*	STG
SO-0482	Mk 114 *(Asroc/SQS-26BX)*	STG
• TORPEDOMAN'S MATE		
Advanced Undersea Weaponsman		
TM-0716	Torpedo Mk 16/Mod 6	TM
TM-0718	*Asroc* Missiles Assembly	TM
TM-0719	*Subroc* Missile Technician (STEM)	TM
TM-0721	*Subroc* Missile Assembly	TM
TM-0726	Torpedo Mk 27/Mod 4	TM
TM-0737	Torpedo Mk 37/Mod O and/or Mk 37/Mod 1	TM
TM-0743	Torpedo Mk 43/Mod 1 and/or Mod 3	TM
TM-0744	Torpedo Mk 44/Mod 0 and/or Mod 1	TM
TM-0745	Torpedo Mk 45/Mk 102 Warhead	TM
TM-0746	Torpedo Mk 46	TM
TM-0771	Nuclear Depth Bomb Technician	TM, GMT
• GUNNER'S MATE		
GM-0854	Rocket Launcher Mk 108 Maintenanceman	GMC
GM-0856	VDS AN/SQA-10 Hoist Maintenanceman	GMG
Mount Maintenanceman		
GM-0873	5"/54 Mk 42	GMG
GM-0926	Warhead Maintenance Specialist	GMT
GM-0931	Nuclear Technician	GM
Guided Missile Launching System Technician		
GM-0984	*Terrier* Mk 9	GMM
GM-0986	*Terrier* Mk 4/10	GMM
GM-0987	*Tartar* Mk 11	GMM
GM-0988	*Tartar* Mk 13	GMM
GM-0991	*Asroc* Launching Group Mk 16	GMM
GM-0997	*Talos* Mk 7	GMM
GM-0998	*Talos* Mk 12	GMM

—IT'S YOUR NEC

Along with associating most NECs closely with ratings came the decision that the same principle should apply at the E-2 and E-3 level. Here again it is to the Navy's advantage to have every man "rating associated" so he would not receive training he would not use. Consequently, every non-rated man who is not an identified striker must be coded with the entry training NEC of his future rating. These NECs are assigned by service schools, basic training commands, and commanding officers. This NEC may be changed by a non-rated man's command, but it can't be changed to NEC 0000.

How will the change to the NEC source rating concept affect your career?

First, if you have an NEC specialty the prospects of your staying in it are excellent. It will be taken into consideration each time you are reassigned, and you will generally have ample opportunity to stay in your field or progress to some allied—not different—special skill.

Second, you will only be eligible for special advanced training if the NEC earned by graduation from this training is one that is listed for your rating.

Third, if you're planning to take the exam for third class you must be either an identified striker, like YNSN, or have the proper NEC entry trainee classification. If your entry trainee code is wrong, you won't be allowed to take the advancement test. As you can see, NECs will play an important role in many Navy careers.

At present, service ratings do not greatly affect your eligibility to hold an NEC. For example, the source rating for GM-0988 *Tartar* Mk 13 is GMM—but, at least for the time being, it can be assigned to GM and GMG ratings. Requirements for the NEC are all written for the GMM, however, and *at some future date* the NEC will be held only by the specified service rating (GMM) or the general rating (GM). GMGs will not be eligible.

One more point. Suppose you're a high rated petty officer and do NOT have an NEC. Should this be a source of concern to you? Don't worry. You've probably noticed that sailors who know their jobs and have plenty of general experience are often used to supervise the specialists. That's no accident. Good petty officers who know their rating are, always have been, and always will be the backbone of the Navy.

Now, here's the rundown on the NECs and their source ratings.

The table on this and the following pages shows the new list of rating series NECs, along with the ratings eligible. Special series and entry trainee NECs underwent few changes and may be found in the *Manual of Navy Enlisted Classifications* (NavPers 15105G).

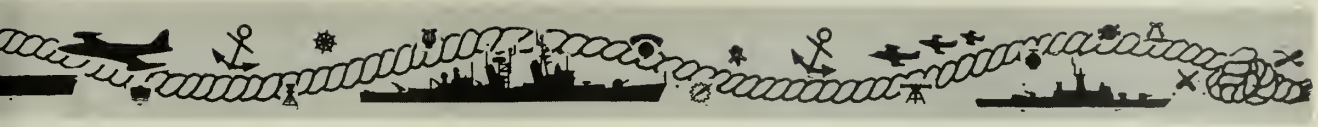
NEC	FUNCTION	SOURCE RATINGS
•	**FIRE CONTROL TECHNICIAN**	
	Weapons Direction Systems and Target Designation Systems Technician	
FT-1113	*Tartar*	FTM
FT-1114	TDS Mk 6	FTG
FT-1116	*Talos*	FTM
FT-1117	TDS Mk 5	FTG
FT-1118	*Terrier*	FTM
FT-1119	*Talos*	FTM
	Automatic Gunfire Control Systems Technician	
FT-1123	Mk 37	FTG
FT-1126	Mk 56	FTG
FT-1128	Mk 68	FTG
FT-1129	Mk 87	FTG
	Missile Weapons Control System Technician	
FT-1151	*Typhon*	FTM
FT-1155	*Terrier* Mk 73	FTM
FT-1157	*Terrier* Mk 76	FTM
FT-1158	*Talos*	FTM
FT-1159	*Tartar*	FTM
•	**FIRE CONTROL RADAR TECHNICIAN**	
FT-1161	AN/SPW 2	FTM
FT-1162	AN/SPQ 5A	FTM
FT-1163	AN/SPG 49	FTM
FT-1164	AN/SPG 51	FTM
FT-1165	AN/SPG 55	FTM
FT-1166	AN/BPQ 2	FTG
FT-1167	AN/SPW 2, AN/SPG 49	FTM
FT-1169	AN/SPS-48	FTM, ET
	Underwater Fire Control Systems Technician	
FT-1172	Mk 112	FTG
FT-1173	Mk 113/Mod 2	FTG
FT-1174	Mk 113/Mod 5	FTG
FT-1175	Mk 101	FTG
FT-1179	Mk 106	FTG
	Fire Control Computer Technician	
FT-1182	Mk 100/Mod 2	FTM
FT-1184	Mk 118	FTM
FT-1185	Mk 119	FTM
FT-1186	Mk 111/Mod 1	FTM
•	**MISSILE TECHNICIAN**	
MT-1312	*Regulus I Technician*	MT
MT-1313	*Talos Technician*	MT, FTM
MT-1314	*Tartar/Terrier Technician*	MT, FTM
•	**ELECTRONICS TECHNICIAN**	
	Radar Maintenance Technician	
ET-1513	AN/SPS-32/33	ET
ET-1514	AN/SPS-40	ET
ET-1515	AN/SPS 29 or AN/SPS 37	ET
ET-1516	AN/SPS 8	ET
ET-1517	AN/SPS or AN/SPS 42	ET, FTM
ET-1518	AN/SPS 43	ET
ET-1519	AN/SPS 30	ET
ET-1524	Moon Relay Communications Maintenance Technician	ET
ET-1525	Special Maintenanceman	ET
	Automatic Landing System Technician	
ET-1526	AN/SPN-10	ET
ET-1534	Scatter Radio Equipment Technician	ET
	Communication Security Devices Equipment Technician	
ET-1539	KW-37R, KW-7, KG-14, KG-15	ET, RM
ET-1541	KO-5, KW-22	ET, RM
ET-1543	KW-26	ET, RM
ET-1544	KW-37R	ET, RM
ET-1545	KO-6A	ET, RM
ET-1546	KY-1	ET, RM
ET-1547	KW-7	ET, RM, AT
ET-1548	KG-13	ET, RM
ET-1549	KW-37T	ET, RM
	Inertial Navigation Technician	
ET-1551	Mk I SINS	ET, IC
ET-1552	Mk II/Mod 1 SINS (N7B)	ET
ET-1553	Mk III/Mod 4 SINS	ET
ET-1577	Ground Controlled Approach Technician	ET
ET-1578	TACAN Navigation Technician	ET

NEC	FUNCTION	SOURCE RATINGS
ET-1581	Nuclear Weapons Technicol Repoirmon	ET, GMT
ET-1591	Electronics Stondards Speciolist	ET
ET-1593	Electronics Warfare Equipment Technicion	ET
ET-1595	Special Communications Maintenance Technician, Mobile	ET, RM
ET-1596	Special Communications Maintenance Technician, Fixed	ET, RM
• DATA SYSTEMS TECHNICIAN		
DS-1615	NTDS System Technician	DS
DS-1616	NTDS Display Equipment Technician	DS
DS-1617	NTDS Dota Tronsmission Technicion	DS
DS-1618	NTDS Computer Technicion	DS
DS-1631	OpCon System Technician	DS
DS-1632	OpCon System Computer Technician	DS
DS-1633	OpCon System Display Equipment Technician	DS
DS-1634	OpCon System Test Equipment Technician	DS
DS-1635	OpCon System Test Equipment Technician OpCon System Peripheral Equipment Technician	DS DS
DS-1653	A5-2/3 Surfoce System	DS, RD, PH, PT, MA, AT
• INSTRUMENTMAN		
IM-1812	Instrumentman, Watch and Clock	IM
• OPTICALMAN		
OM-1902	Optical Repairman, Leod Computing Sights	OM
OM-1903	Optical Repairman, Submarine Periscopes	OM
OM-1904	Optical Repairman, Rangefinders	OM
• POSTAL CLERK		
PC-2211	Area Mail Router	PC
• RADIOMAN		
RM-2303	Rodio Operator, High Speed (30-40 wpm)	RM
RM-2314	Cryptographic Machines Repairman	RM
RM-2315	Cryptographic Machines Repairmon, Automatic Off-Line Equipment	RM
RM-2317	Communication Security Devices Equipment Operator	RM
RM-2318	Circuit Control Operator	RM
RM-2319	Circuit Control Area Operator	RM
RM-2327	Moon Relay Communications Operator	RM
RM-2332	SSN/SSBN Radio Equipment Technician	RM, ET
RM-2342	Teletype Repairman	RM
RM-2346	Electronic Communication Equipment Operator/Repairman	RM, ET
RM-2393	Special Communications System Operator, Fixed	RM
RM-2394	Special Communications System Operator, Mobile	RM
• COMMUNICATIONS TECHNICIAN		
CT-2401	Technical Branch (CT T)	CT
CT-2402	Administrative Branch (CT A)	CT
CT-2403	Maintenance Branch (CT M)	CT
CT-2404	Communications Bronch (CT O)	CT
CT-2405	Collection Bronch (CT R)	CT
CT-2406	Interpretive Bronch (CT I)	CT
• YEOMAN		
YN-2505	Naval Intelligence Clerk	YN
YN-2513	Court Reporter, Stenographic	YN
YN-2514	High Speed Stenographer	YN
YN-2515	Court Reporter, Closed Microphone	YN
YN-2516	Legal Clerk	YN
• PERSONNELMAN		
PN-2612	Clossification Interviewer	PN
PN-2614	Job Analyst	PN
PN-2616	Correctionol Counselor	PN
• MACHINE ACCOUNTANT		
MA-2712	Tabulating Machine Serviceman	MA
MA-2721	Electronic Data Processing Systems Analyst	MA
MA-2722	Electronic Data Processing Systems Programer	MA
MA-2723	Electronic Data Processing Systems Equipment Operator	MA
• STOREKEEPER		
SK-2813	Commissary Store Monoger	SK, SH, CS
Repair Parts Man		
SK-2B63	Fleet Ballistic Missile Weapons System	SK
• SHIP'S SERVICEMAN		
SH-3111	Navy Exchange Manager	SH, SK
SH-3112	Store Clerk	SH
SH-3122	Barber	SH
SH-3142	Tailor	SH
SH-3154	Laundrymon ond Drycleoner	SH
• JOURNALIST		
JO-3221	Radio-TV Speciolist	JO
• FLEET BALLISTIC MISSILE WEAPONS SYSTEM PERSONNEL		
Missile Fire Control System Technician		
3307	Mk B0 with Mk 1 and Mk 2 Missile	FTM
3308	Mk B4 with Mk 2 and Mk 3 Missile	FTM
3309	Mk B0 with Mk 3 Missile	FTM
Missile and Missile Checkout Technician		
3314	Mk 1 and Mk 2 Missile with Mk 80 FCS	MT
3315	Mk 2 Missile with Mk 84 FCS	MT
3316	Mk 2 ond Mk 3 Missile with Mk 84 FCS	MT
3317	Mk 3 Missile with Mk 80 FCS	MT
3318	Mk 1, 2, and 3 Missile Logistic Technicion	MT
Inertial Navigation Subsystem Technician		
3322	Mk II/Mod 0	ET
3323	Mk III/Mod 0/1	ET
3324	Mk II/Mod 2	ET
3325	Mk II/Mod 4	ET
NavDAC Technician		
3331	Mk 2/Mod 3; Mk 2/Mod 1 SDC	ET
3332	Mk 2/Mod 2; Mk 3/Mod 0 SDC	ET
3333	Mk 2/Mod 4; Mk 2/Mod 1 SDC	ET
3334	Mk 2/Mod 4; Mk 3/Mod 1 SDC	ET
Navigotion Aids Technician		
3338	BRN-3/WPN-2	ET
3339	BRN-3/WPN-3	ET
Louncher ond Ordnonce Subsystem Technicion		
3342	Mk 15 Louncher	TM
3343	Mk 17/Mod 0 Louncher	TM
3344	Mk 17-2 Launcher	TM
3345	Mk 21-0 Louncher	TM
3346	Mk 21-1 Louncher	TM
• NUCLEAR POWERPLANT OPERATOR		
Submarine		
3351	Welder	MM, EN, EM, IC
3353	Reactor Control	ET, IC
3354	Electrical	IC, EM
3355	Mechanicol	MM, EN

NEC Cancellations

The following NECs were canceled:

BM-0105	ET-1533	EM-4615	TD-7519
BM-0114	ET-1535	EM-4652	TD-7523
BM-0152	RM-2312	EM-4664	TD-7563
BM-0153	RM-2322	EM-4668	AQ-7935
QM-0223	MA-2743	SF-4932	PH-8137
RD-0307	SK-2811	EA-5511	PH-8141
RD-0312	SK-2851	EA-5515	HM-8443
RD-0315	SK-2861	UT-6118	HM-8445
SO-0403	SK-2871	UT-6138	HM-8447
SO-0404	SK-2872	UT-6145	3433
SO-0405	SK-2875	AD-6433	9528
SO-0412	CS-3032	AX-6525	9548
SO-0419	CS-3042	AT-6613	9582
SO-0421	CS-3051	AT-6631	9584
SO-0424	SH-3163	AT-6633	9587
TM-0732	JO-3202	AT-6636	9591
TM-0735	DM-3706	AO-6852	9721
GM-0883	EN-4362	AB-7042	9723
GM-0972	EM-4605	AM-7207	9791
MT-1316	EM-4611	AM-7216	
ET-1506	EM-4614	TD-7518	



NEC	FUNCTION	SOURCE RATINGS
3356	Engineering Laboratory Technician Shore-Based	MM, EN
3371	Nuclear Powerplant, Shore-Based, Pressurized	CE, EO, CM, SW, UT, HM
	Surface Ship	
3383	Reactor Control	ET, IC
3384	Electrical	IC, EM
3385	Mechanical	MM, BT, EN
3386	Engineering Laboratory Technician	MM, BT, EN
•	MACHINIST'S MATE	
MM-4272	Outside Machinist, Ship Repair	MM
MM-4282	Gas-Generating Mechanic	MM
MM-4294	Refrigeration and Air-Conditioning Mechonic	MM, EN
•	ENGINEMAN	
EN-4316	Fairbanks-Morse, 38A6 3/4-Diesel Engine Technician	EN
EN-431B	Diesel Engineer, Packard High-Speed Non-magnetic Engine	EN
EN-4353	Ground-Controlled-Approach Power Equipment Mechanic	EN
EN-4354	Gas-Turbine Engineer	EN
EN-4356	SSN/SSBN Auxiliary Equipment Technician	EN, MM
•	BOILERMAN	
BT-4514	Automatic-Combustion Control Operator	BT, BR
BT-4515	Pressure-Fired Boiler Operator	BT
BT-4516	Welder, Boilers	BT
BT-4517	1200 PSI Steam-Generating Plant Operator	BT
•	ELECTRICIAN'S MATE	
EM-4613	Motion Picture Projection Equipment Repairman	EM, IC
	Automatic Degaussing Equipment Electrician	
EM-4666	Minesweepers	EM
•	INTERIOR COMMUNICATIONS ELECTRICIAN	
IC-4712	Automatic Telephone Repairman	IC
IC-4722	Gyro Repairman	IC, EM
IC-4723	Gyrocompass Tender Repairman	IC
	Gyrocompass Operator/Technician	
IC-4725	Mk 19	IC
IC-4726	Mk 23	IC
IC-4727	Mk 24	IC
IC-4731	Auxiliary Electrician	IC, EM
IC-4737	Submarine Steering and Diving Control Technician	IC
IC-4745	Optical Landing System Technician	IC
IC-4746	Closed-Circuit TV Technician	IC
•	SHIPFITTER	
SF-4915	Radiographer, X-ray	SF, ML, MR, BR
SF-4916	Radiographer, X-ray and Isotope Source	SF, ML, MR, BR
SF-4917	Nondestructive Testing Supervisor	SF, ML, MR, BR
SF-4944	Intermediate Welder	SF, BT
SF-4945	Advanced Welder	SF
SF-4946	Reactor Plant System Welder	SF
•	CONSTRUCTION ELECTRICIAN	
CE-5631	Shore-based Powerplant Operator/ Maintenance	CE
CE-5642	Central Office Exchange Repairman	CE
•	EQUIPMENT OPERATOR	
EO-5707	Rotary and Percussion Water Well Driller	EO
EO-5708	Blaster	EO
•	STEELWORKER	
SW-6015	Certified Welder	SW
•	UTILITIESMAN	
UT-6117	Petroleum Tank Farm Operator	UT
•	AVIATION MACHINIST'S MATE	
AD-6422	Jet Test Cell Operator	ADJ
AD-6432	Helicopter Mechanic	AD
AD-6492	Target Aircraft Mechanic	AD
•	AVIATION ANTISUBMARINE WARFARE TECHNICIAN	
AX-6526	Magnetic Airborne Detection Equipment	AX, AT
AX-6527	Airborne Sonar	AX, AT
AX-6528	Sonobuoy	AX, AT
AX-6529	*Jezebel/Julie*	AX, AT
•	AVIATION ELECTRONICS TECHNICIAN	
AT-6616	ECM System Technician	AT
AT-6617	ATDS System Technician	AT
	Aviation Communication and Novigation Equipment Technician	
AT-6634	TACAN Navigation	AT
AT-6665	Drone Electronics Technician	AT
AT-6677	Airborne Radio Operator	AT
•	AVIATION ORDNANCEMAN	
AO-6835	Missile Test Technician (Sparrow III)	AO
	Aircraft Missile Ordnance Technician	
AO-686B	Sparrow III	AO
AO-6878	Sidewinder	AO
AO-6B79	Bullpup	AO
•	AIR CONTROLMAN	
AC-6922	Ground-Controlled-Approach Controller	AC, RD
•	AVIATION BOATSWAIN'S MATE	
	Arresting Gear and Catapult Man	
AB-7013	Steam Catapult	ABE
AB-7014	Hydraulic Catapult	ABE
AB-7015	Arresting Gear	ABE
AB-7022	Aviation Gasoline Handler	ABF
•	AVIATION ELECTRICIAN'S MATE	
AE-7122	Jet Test Cell Maintenanceman, Electrical	AE
AE-7131	Automatic Flight Reference System Technician	AE
AE-7137	Automatic Flight Control System Technician	AE
•	AVIATION STRUCTURAL MECHANIC	
AM-7222	Inert-Gas Arc-Welder	AM
AM-7224	Aircraft Structural Radiographer	AM
•	PARACHUTE RIGGER	
PR-7312	Pressure Suits Maintenanceman	PR
•	AEROGRAPHER'S MATE	
AG-7412	Analyst-Forecaster	AG
AG-7414	Radiosonde Operator	AG
AG-7423	Computer Operator/Programer	AG

NEC Conversions

NECs in the left-hand column below have been canceled; men holding them have been changed to the NEC designator on the right:

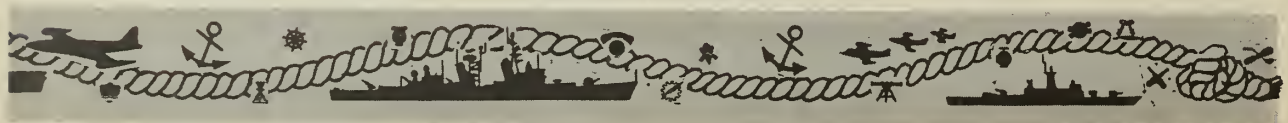
NEC Canceled	*Converts to NEC*
TM-0734	TM-0743
GM-0989	GM-0988
ET-1511	FT-1169
ET-1542	ET-1541
3462, 3463, 3464	3469
DC-5023	9523
TD-7515	TD-7513
PH-8145, PH-8146, PH-8147	PH-8149
HM-8444	HM-8485
9304	8394
9503	DS-1653
9931	GM-0931
3511	FT-1151

In the table below, NECSs on the left have been canceled, and men holding them are recorded on an individual basis.

NEC Canceled	*Possible Recoding To*	*For Men in*
SO-0405	SO-0406	STG, ST
TM-0735	TM-0737	TM
EM-4611	EM-4666	EM
AX-6525	AX-6526, AX-6527 AX-6528, AX-6529	AX
AT-6636	AT-6634	AT
AB-7042	8289	Any
TD-7523	Applicable 8300 series	TD



NEC	FUNCTION	SOURCE RATINGS
• TRADEVMAN		
TD-7513	Cambat Infarmation Synthetic Troining Devices (nan-digital) Technician	TD
TD-7514	Cambat Infarmatian Electranic Synthetic Training Devices (digital) Technician	TD
TD-7543	Instrument Flight and Aerial Navigation Training Devices Technician	TD
TD-7553	Submarine Training Devices (nan-digital) Technician	TD
TD-7555	Submarine Training Devices (digital) Technician	TD
• AVIATION FIRE CONTROL TECHNICIAN		
AQ-7916	Missile Test Equipment Maintenance Technician (Sparraw III)	AQ, AT
Intercept Systems Technician		
AQ-7928	ACS Aera 19 Series	AQ
8ambing Systems Technician		
AQ-7946	8amb Directar Set AN/AS8-1	AQ
AQ-7947	8amb Directar Set AN/ASB-7	AQ
AQ-7948	8amb Directar Set AN/AS8-12	AQ
• PHOTOGRAPHER'S MATE		
PH-8126	Phatagraphic Quality Contralman	PH
PH-8136	Underwater Phatagrapher, Scuba Diver	PH
PH-8143	Matian Picture Cameraman	PH
PH-8144	Motian Picture Directar	PH
PH-8148	Dacumentary/News Still Phatagrapher	PH, JO
PH-8149	Matian Picture Saund Transmissian and Recarding Engineer	PH
PH-8192	Phatagraphic Equipment Repairman	PH
PH-8195	Camera Cantral System Maintenanceman	PH, AT
• AIRCRAFT SYSTEMS MAINTENANCE PERSONNEL		
8303	C-121 System	ADR, AT, AO, AE, AM, AX, TD
8309	A-5 System	ADJ, AT, AO, AQ, AE, AM, PH, TD
8318	C-130 System	ADJ, AT, AE, AM, TD
8319	P-3 System	ADJ, AT, AX, AO, AE, AM, PH, TD
8324	F-4 System	ADJ, AT, AO, AQ, AE, AM, TD
8331	A-6 System	ADJ, AT, AO, AQ, AE, AM, PH, TD
8337	E-2 System	ADJ, AT, AE, AM, TD
8339	E-1 System	ADR, AT, AE, AM, TD
8344	F-8 System	ADJ, AT, AO, AQ, AE, AM, TD, PH
8351	A-4 System	ADJ, AT, AO, AQ, AE, AM, TD
8357	A-3 System	ADJ, AT, AO, AQ, AE, AM, TD, PH
8364	F-3 System	ADJ, AT, AO, AQ, AE, AM, TD
8371	F-6 System	ADJ, AT, AO, AQ, AE, AM, TD
8376	UH-2 System	ADJ, AT, AE, AM, TD
8377	SH-3 System	ADJ, AT, AX, AO, AE, AM, TD
8378	SH-34 System	ADR, AT, AX, AO, AE, AM, TD
8381	S-2D System	ADR, AT, AX, AO, AE, AM, TD
8394	*Dash* Technician	ETN, EN, ADJ, ATN
• HOSPITAL CORPSMAN		
HM-8403	Submarine Medicine Technician	HM
HM-8404	Medical Field Service Technician	HM
HM-8405	Advanced General Service	HM
HM-8406	Aviation Medicine Technician	HM
HM-8407	Nuclear Medicine Technician	HM
HM-8408	Cardiopulmanary Technician	HM
HM-8409	Aviatian Physiolagy Technician	HM
HM-8412	Clinical Labaratary Assistant	HM
HM-8413	Tissue Culture Technician	HM
HM-8414	Clinical Chemistry Technician	HM
HM-8416	Radiaisatapes Technician	HM
HM-8417	Clinical Labaratary Technician	HM
HM-8418	Tissue 8ank Technician	HM
HM-8432	Preventive Medicine Technician	HM
HM-8442	Medical Administrotive Technician	HM
HM-8452	X-ray Technician	HM
HM-8453	Electracardiograph and Basal Metabalism Technician	HM
HM-8454	Electraencephalagraphy Technicion	HM
HM-8462	Optician (general) Technician	HM
HM-8463	Optician (labaratary) Technician	HM
HM-8472	Medical Photagraphy Technician	HM
HM-8482	Pharmacy Technician	HM
HM-8483	Operating Roam Technician	HM
HM-8484	Eye, Ear, Nase, and Thraat Technician	HM
HM-8485	Neurapsychiatry Technician	HM
HM-8486	Uralagical Technician	HM
HM-8487	Occupatianal Therapy Technician	HM
HM-8488	Orthapedic Appliance Technician	HM
HM-8489	Orthapedic Cast Raam Technician	HM
HM-8492	Special Operatians Technician	HM
HM-8493	Medical Deep Sea Diving Technician	HM
HM-8494	Physical Therapy Technician	HM
HM-8495	Dermatalogy Technician	HM
HM-8496	Embalming Technician	HM
HM-8497	Medical Illustrating Technician	HM
HM-8498	Medical Repoir Mechonic	HM
• DENTAL TECHNICIAN		
DT-8703	General, Advanced	DT
DT-8707	Field Service	DT
DT-8713	Clinical Labaratory	DT
DT-8714	Research	DT
DT-8722	Administrative	DT
DT-8732	Repair	DT
DT-8752	Prasthetic	DT
DT-8753	Prosthetic, Advanced	DT
DT-8765	Maxillofacial Prasthetic	DT
• STEWARD		
SD-9011	Flag Officers' Mess	SD
SD-9013	Closed Mess Manoger	SD
SD-9014	Chef	SD



THE BULLETIN BOARD

And Here's Your Chance To Enter Space Program If You Meet the Deadline

You might be qualified for one of the new projected openings in the space program. The National Aeronautics and Space Administration (NASA) is looking for scientist-astronauts for the nation's future manned space flight missions.

You need not be a pilot to be eligible, but you must be able to pass the aviation flight physical examination. There are four other basic requirements that must be fulfilled. You must:

- Be a U. S. citizen.
- Have been born on or after 1 Aug 1930.
- Be not taller than six feet.
- Have a bachelor's degree, and a doctorate in the natural sciences, medicine or engineering. However, you may apply even if you do not fulfill the doctorate requirement, providing you possess what you consider the equivalent in experience.

If you meet the above requirements and want to apply for the space program, you must submit a letter of application to the Chief of Naval Personnel (Pers Blbc), via your commanding officer, by 15 Dec 1964. The following documents must accompany your application:

- A completed copy of Standard Form 57, Federal Employment Application Form (available at any U.S. post office or Civil Service employment Office – BuPers will provide form if it is not otherwise available).
- A completed original and two copies of Standard Form 88, Certificate of Medical Examination.
- Two completed copies of Standard Form 89, Report of Medical History.

Also, the following documents must be sent directly from the institutions indicated to reach the Bureau of Naval Personnel (Pers Blbc) not later than 15 Dec 1964:

- Transcripts of academic records from all institutions of higher education attended and
- Scores in the Graduate Record Examinations administered by the Educational Testing Service, Princeton, N.J. If you have not taken the Graduate Record Examination, you should so indicate on your application to BuPers. The Bureau will provide necessary application forms and instructions for fulfillment of this requirement.
- Finally, if you are going to apply for the space program, you must notify BuPers by message of your intentions, indicating whether or not you have completed the Graduate Record Examination, and if Standard Form 57 is available.
- The selection board considering applications for the scientist-astronaut program will convene during the period of 16-18 December. Personnel qualified for application are encouraged to notify BuPers of their intentions as soon as possible. Exception to the 15 December deadline is possible in extreme cases.

Bainbridge Scholarship Given By Officers' Wives Club

Recipients of the 1964-65 Bainbridge Officers' Wives Club scholarship have been named at the Naval Training Center, Bainbridge, Md. The $300 scholarship is awarded to dependents of active duty, retired or deceased officers or enlisted men of the Regular Navy or Marine Corps.

This year the award was divided between two dependents. Bonita Ann Harding, daughter of a retired master chief and John Hamilton Mika, son of a retired Marine officer.

All-Navy Cartoon Contest
William R. Maul, CTCA, USN.



". . . and with one majestic sweep, our hero is transformed from Seaman Barnfettle into Rodney Barnfettle, boy admiral!"

E-8/E-9 Detailing Desk Will Aim to Put Right Man in The Right Job

There's a new desk in the enlisted detailing section of BuPers. From it, as of 1 Sep 1964, all assignments of the Navy's 11,000 E-8 and E-9 chief petty officers are made.

Because senior and master chiefs will hereafter be assigned only to established E-8 and E-9 billets, the Bureau has decided that coordination of these assignments on a Navy-wide basis can be accomplished best from one central position, where all pertinent information is at hand.

Some chiefs have already been served by the E-8/E-9 detailers (the present rate averages 25 a day), but, as with any new system, total implementation is not possible overnight. There is a nominal phasing-in period.

All E-8s and E-9s who received transfer orders before the establishment of the new detailing section—whether the orders came from the Bureau or a cognizant EPDO—can expect to execute these orders, providing this can be done by the end of the year. If they cannot, your commanding officer will be corresponding with the Chief of Naval Personnel (Pers B-2121) to determine if the Bureau intends to confirm or cancel your orders. However, it will not be necessary for him to confirm those orders issued by the Bureau after 1 September—only those issued before that date.

If you are not yet under orders, you have a job to do right now.

You must submit a new preference card if you want to receive the fullest possible consideration as to your choice of duty when rotation rolls around. Your assignment is now handled in a manner very similar to officer assignment. Each E-8/E-9 assigned by BuPers will be ordered by name to a specific billet within the authorized allowance of the receiving command.

Pending receipt of the new E-8/E-9 Duty History and Preference Card, all senior and master chiefs are to submit an Officer History Card (NavPers 765 Rev) and an Officer Preference and Personal

Information Card (NavPers 2774 Rev) to the Chief of Naval Personnel (Pers B-2121) as soon as possible. Because some information items on these forms are applicable only to officers, only the following blocks on each card should be completed:

- NavPers 765: Blocks 1, 2, 3 (insert NEC), 4, 6, 7, 16-26 and 31-35.
- NavPers 2774: Blocks 13-16, 18, 20-27, 28 (NEC) and 30.

A note about duty preference: The two top enlisted pay grades will as a rule, fill administrative roles, as might be expected. A commanding officer determines how many (if any) E-8/E-9 billets are required in his command structure and, if the allowance request is approved, the billet or billets are established. As a general rule, you can anticipate that only larger complexes are going to have slots for senior and master chiefs. (Example: There are no billets at Reserve training centers or NROTC campuses; a scattered few in MAAGS and Missions; and generally one at each main recruiting station—none at sub-stations.)

An E-8 or E-9 billet is interchangeable, but neither pay grade will ever be ordered to anything other an E-8 or E-9 billet under the new system (however, it's possible that a lower pay grade may fill an E-8 or E-9 billet as an interim measure).

For this reason, the detailers may sometimes find it impossible to honor your preferences, although they try to come as close as they can. Your best bet is to give the detailers enough latitude in your selections so they can come as close as possible to honoring one of your preferences. (Example: Newport, Great Lakes or Washington; Norfolk, Charleston or Key West; or San Diego, Los Angeles or San Francisco.)

If you're an E-7, upon notification of being selcted for E-8 you should immediately submit a history and preference card to Pers B-2121. And for everyone, these cards may be resubmitted whenever your preferences or personal information data change.

BuPers Notice 1306 of 11 Sep 1964 gives details on this subject.

All-Navy Cartoon Contest
James R. Branum, CT1, USN.



"Gentlemen, I need (heh, heh) (chuckle) three volunteers."

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 34—Urged all qualified naval personnel to exercise their right to vote.

No. 35—Announced selections of captain and commander, staff corps, for fiscal year 1965.

No. 36—Announced the 10th anniversary of uss *Nautilus*' (SSN 571) commissioning.

No. 37—Announced the promotion to lieutenant commander of women line officers for fiscal year 1965.

No. 38—Expressed appreciation of the generous response to the John F. Kennedy memorial library fund drive.

No. 39—Announced selections for temporary promotion to major, U.S. Marine Corps.

No. 40—Announced the death of former President Herbert Hoover, and directed that a month of mourning be observed.

No. 41—Announced details of the burial of former President Herbert Hoover.

No. 42—Announced selections for promotion to captain, U.S. Marine Corps.

No. 43—Announced selections for promotion to commander (line), USN, for fiscal year 1965.

Instructions

No. 1120.12J—Outlines the eligibility requirements and processing procedures whereby certain officers may apply for appointment as permanently commissioned officers in the Regular Navy.

No. 1300.26D—Describes current overseas tour lengths, Navy policies on personnel rotation, and policies concerning overseas movement of dependents of naval personnel serving in overseas commands and activities.

No. 1510.103—Specifies eligibility requirements for first enlistment personnel desiring to attend Sonar Technician Class "C" classes.

No. 1610.9C—Directs that training programs incorporate policies and procedures for training in the Code of Conduct.

No. 1750.5C—Discussed the application for, and issuance of, the Uniformed Services Identification and Privilege Card, DD Form 1173.

Notices

No. 1430 (2 October)—Announced the names of those eligible for advancement in rating to chief petty officer, acting appointment, in two increments; the first, effective 16 November, the second, 16 January.

No. 1120 (8 October)—Announced the selection of personnel recommended for appointment in the grade of ensign, Medical Service Corps, USN, by the Naval Examining Board.

No. 1531 (8 October)—Announced the list of active duty personnel provisionally selected for entrance to the U.S. Naval Preparatory School as

All-Navy Cartoon Contest
Frederic W. Donour, Jr., PC3, USN



"By the way, Farnsworth, your replacement's here."

candidates for appointment to the Naval Academy.

No. 1920 (9 October)—Provides additional information concerning the retention, release, reversion and retirement of Reserve and temporary officers in the grade of commander and lieutenant commander.

No. 1900 (12 October)—Authorized the early separation of enlisted personnel who become eligible for separation during the Christmas-New Year holidays.

No. 1120 (13 October)—Clarifies the provisions of BuPers Inst. 1120.18J regarding participation in the E-7 examination of PO1s who are applicants for warrant officer.

No. 1520 (20 October)—Announced the selection of officers for postgraduate and undergraduate educational programs.

No. 1418 (22 October)—Announced the schedule of Navy-wide examinations to be held in February for enlisted personnel.

No. 1700 (23 October)—Announced details of the 10th All-Navy Cartoon Contest.

No. 1430 (30 October)—Authorized the advancement of personnel who have been selected to be advanced in rating to Senior and Master Chief Petty officer.

No. 1020 (4 November)—Announced the requirement for Navy enlisted men E-6 and below to have in their possession one pair of gymnasium shoes, and also corrected certain errors in Change No. 3 to *U.S. Navy Uniform Regulations.*

Command Action Required To Assure Promotion for Some 1962-63 LTJGs

All commands are again advised of an administrative procedure that must be followed to make certain otherwise ineligible lieutenants (junior grade) eligible for promotion to lieutenant.

All LTJGs of the Regular Navy with dates of rank between 2 Jul 1962 and 1 Jul 1963 were originally promoted to that grade under 10 U.S. Code 5787, a temporary emergency authority, and as such are not eligible for consideration for further promotion. So they must be reappointed under another authority. No change in the date of rank now held by these officers will occur as a result of receiving a superseding temporary appointment—this is merely an administrative procedure.

The following officers are affected:

- All permanent officers of the Regular Navy serving under temporary appointments in the grade of lieutenant (junior grade) who have dates of rank within the period stated above, and
- All temporary officers of the Regular Navy serving in the grade of lieutenant (junior grade) having dates of rank within that period.

Commanding officers are directed by SecNav Notice 1412 of 29 Aug 1964 to deliver superseding temporary appointments to officers affected by this situation, utilizing the format enclosed in the notice.

Correspondence Courses

In correspondence course news this month:

Radarman 3 & 2, NavPers 91269-1 supersedes NavPers 91267-1C and NavPers 91269. This course is classified confidential, Modified Handling Authorized.

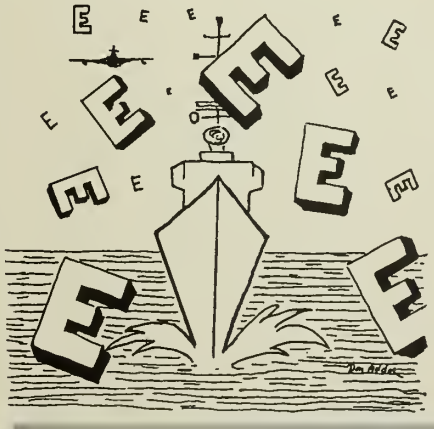
Petroleum Logistics, NavPers 109-04-1 has been discontinued. The cutoff date for present enrollees is 23 Aug 1965.

TOP SEA DOGS . . .

More 'E' Award Winners

Top dogs in the Battle Efficiency "E" competition have been flying their meatball pennants for some time now, but the announcements are still coming in. Here are the latest additions to the roster of "E's". For others, see the October 1964 issue of *ALL HANDS*, page 20.

Fighter Squadron 143—AirPac
***USS Henrico* (APA 45)—PhibPac**
***USS Providence* (CLG 6)—CruDesPac**
***USS Enterprise* (CVAN 65)—AirLant**
***USS Persistent* (MSO 491)—MinPac**
***USS Bushnell* (AS 15)—SubLant**
***USS Kittiwake* (ARS 13)—SubLant**
***USS Grauper* (AGSS 214)—SubLant**
***USS Tigrone* (AGSS 419)—SubLant**
***USS Darter* (SS 576)—SubLant**
***USS Chivo* (SS 341)—SubLant**
***USS Sea Leopard* (SS 483)—SubLant**
***USS Sea Lion* (APSS 315)—SubLant**
***USS Siraga* (SS 485)—SubLant**
***USS Irex* (SS 482)—SubLant**
***USS Sea Robin* (SS 407)—SubLant**
***USS Entemedor* (SS 340)—SubLant**
***USS Skipjack* (SSN 585)—SubLant**
***USS Chapper* (SS 342)—SubLant**



***USS Mackerel* (SST 1)—SubLant**
***USS Patrick Henry* (SSBN 599)—SubLant**
***USS Ethan Allen* (SSBN 608)—SubLant**
Mobile Construction Battalion Nine—PacFlt
Mobile Construction Battalion Seven—LantFlt

While the Battle Efficiency "E" competition receives plenty of attention, outstanding units also may win recognition in other ways.

Among the Seabees, for instance, the Peltier Award is a big thing, with competition between the E winners of both fleets. This year it was awarded to Mobile Construction Battalion Seven. MCB 7 won the award once before.

At Quonset Point, R. I., crew number six of Helicopter Antisubmarine Squadron Five has won the Dipper award. The Dipper is given twice a year to the top crew of the 72 on the installation.

And in the aviation training command, TraRon Three has won the Admiral's Cup Efficiency Award.

***USS Eldorado* (AGC 11) has proved to be the ichi-ban ship in the "Home Sweet Home" category. As top PhibPac ship in annual inspection, reenlistments, advancements, conduct and community projects, she's received the PhibPac Personnel Excellence Award. Winnings consist of an engraved silver trophy plus $500 for her welfare and recreation fund.**

***USS Vogelgesang* (DD 862) has been picked as the best Atlantic Fleet sub-killer. The Navy League, sponsor of the competition, has presented her crew with a silver bowl.**

Despite old jokes about weathermen, most forecasters are pretty good. Officially, the best is the Naval Air Facility, Naples meteorological crew. The NAF Naples group consists of one officer and 13 enlisted men.

Puerto Rico Is a Choice Location for Duty, Navymen Report

THIS IS YOUR chance for assignment to duty on a tropical isle, one that is also a tourist attraction. It's Puerto Rico, which combines the features of an overseas assignment at a location not far from CONUS. Roosevelt Roads, Ramey and San Juan are three locations which an increasing number of Navy families now call home.

Although the Spanish customs have been modified, the island is still culturally more Spanish than North American. The food, housing, music, literature, family organization, social relationships and celebrations are predominantly Spanish. However, this makes for a more interesting environment for most Navymen. Although the chaperon may not be too popular, the siesta hour during the midday will be. Both are still in evidence.

Because of the influence of its early Spanish conquerors, Puerto Rico is a Spanish speaking island. However, English is taught in all schools. The majority of the educated persons speak, read and write both English and Spanish. You would do well either to learn some Spanish before coming to Puerto Rico or should plan to take up the study of this language upon arrival, both as a goodwill gesture and as a means of further enjoying your stay.

The island enjoys a fine tropical marine climate. On the coastal plains, the daily and annual ranges of temperature are small. Temperatures range from 75 to 85 degrees during the winter months and from 80 to 90 in summer. Throughout the year, easterly trade winds blow during the day, which help to reduce the humidity. Rainfall is abundant and generally of the showery type. There is an average of only five days a year without sunshine, although there is also on average of 210 days a year with some rain. Daytime showers are almost always followed by sunshine.

Housing—You must obtain prior approval from the Commandant Tenth Naval District in order to bring dependents into the area. This entry approval is based on immunization and the availability of housing. When entry approval is requested, you must indicate the command to which ordered.

You should advise your new command as far in advance as possible of your estimated date of arrival and mode of transportation when firm, to enable local transportation arrangements for sponsor and dependents.

Religion—The island is predominantly Roman Catholic. Protestant, Catholic and Latter Day Saints services are conducted weekly at station chapels. English language services in some denominations are held at churches in San Juan. There is a Jewish congregation in San Juan which welcomes servicemen. In addition, the rabbi visits Ramey twice a month.

Domestic Help—Servants are readily available. Untrained maids are usually paid about $2.50 a day. Because of the tremendous increase in hotel construction in Puerto Rico, good servants other than cleaning women are hard to find, and turnover is extremely high. Part-time and full-time maids, cleaning women and laundresses are available. It is customary to provide breakfast and lunch for them.

San Juan

You may be assigned housing either on station public quarters or the San Patricio housing development which is located five miles south of the station. Quarters on station are limited to officers and CPOs, but the housing units at San Patricio are considered quite adequate. Transportation to and from San Patricio is provided by Navy bus. For Fleet units whose home port is San Juan, quarters are provided in the San Patricio housing development.

All quarters are furnished with stoves, refrigerators, beds and mattresses, and other furniture sufficient to satisfy needs. You should bring along as hold baggage a sufficient supply of pots, pans, dishes, silverware, linen, and clothing to set up housekeeping. Household kits containing the basic needs are available but, owing to limited number, arrangements should be made by you or someone in your behalf before you arrive.

Other furnishings such as curtains and drapes, clothes, washers, dryers, fans, tables and occasional tables and floor and table lamps, may be brought with your household effects shipment, or may be bought at the Navy Exchange or at local stores.

There are many establishments selling good furniture in the larger towns but, except for mahogany and bamboo articles, prices are higher than at home. If any of your own furniture is taken, it should be a type suitable for use in the tropics and not susceptible to termites and corrosion.

Renting of private housing is considered extremely expensive and is not recommended. Currently there is a slight waiting period for on-station housing.

Hotels—In San Juan several first-class hotels are available. Daily rates start at $10.00. These hotels generally cater to tourists and during the winter months you may find that accommodations are either not available or are extremely expensive. Reservations in advance can always be made by mail.

Education—The school on the San Juan Naval Station offers standard curriculum for kindergarten through grade six for dependents living in the naval station area.

Kindergarten through junior and senior high school curriculum is provided for Navy dependents at Fort Buchanan. Kindergarten and grades one through six students living in San Patricio are expected to attend school at Fort Buchanan. Bus transportation is provided. All grades except kindergarten are on a full day

All-Navy Cartoon Contest
William R. Maul, CTCA, USN.



"Better luck next time, Harrison—maybe you can work your way up to eighth or ninth on the list."

basis. Bring transcripts of previous school grades or report cards.

There is a nursery school on the San Juan Naval Station, at a cost of $10.00 per month per pupil. The University of Puerto Rico offers good college courses primarily conducted in Spanish with textbooks in English. Florida State University extension courses are available for servicemen and their dependents who wish to use their spare time to study.

Ramey AFB

Government quarters are completely furnished with automatic washers, living room sets, dining room sets, stoves, refrigerators and bedroom sets. The very minimum items of household effects should be brought into the area since the Air Force will not unfurnish these quarters to make room for occupants' household effects. Storage facilities are not available for household effects.

Lawn and garden equipment is not available for care of lawns and hedges which is the responsibility of each occupant. Dependents' assistance has a limited supply of necessary kitchen utensils for issue to new arrivals pending receipt of their household effects. Bring electric fans.

Forfeiture of quarters allowance is required to occupy these quarters. Off-base housing is scarce.

Ramey has an excellent school system for grades one through 12. The extracurricular program takes full advantage of the fine recreation area provided by each school. It is important to obtain transcripts of credits for schooling already completed, as well as available information regarding the children's particular aptitudes and educational levels. If transcripts are not available, you should bring report cards. Florida State University extension courses are available.

Roosevelt Roads

There are usually, but not always, sufficient numbers of officer and enlisted quarters available. At times a short wait may be necessary. Forfeiture of quarters allowance is required to occupy these government quarters. Off-base housing is scarce.

All station government housing is fully furnished with furniture of rattan and mahogany construction. An electric stove, electric water heater

All-Navy Cartoon Contest
Samuel C. Richardson, PHAN, USN



"Attention on deck!"

and a combination refrigerator-freezer are included. A freezer or additional refrigerator is often useful. Washing machines and electric dryers are desirable.

Three TV stations can be received (very few English programs). This activity now operates its own TV station.

Each family provides its own linen, cooking utensils, silverware and china. Crates, boxes, trunks and other packing containers should be limited to disposable types as much as possible since storage space is limited to household furniture.

There is a station school which is a branch of the Antilles Consolidated School with grades from kindergarten through 12 providing standard curriculum. All grades are on a full day basis, 0830 through 1430. Buses carry school children from bus stops near their homes to and from the school. Ample playground is available.

Pets—General information on the shipment of pets will be forwarded when you apply for travel. No taxes are imposed at time of entry nor are licenses required. Veterinary services and kennel accommodations are available to a limited degree.

Passports—Passports are not required.

Clothing—Summertime clothes are in order the whole year—cotton, rayon, nylon washables. During the winter months, in the evenings, a light sweater may be desirable. It is suggested that no heavy fall or winter clothing be brought, especially clothing requiring special storage such as furs. A light raincoat, preferably plastic, will be useful as will the summer uniform raincoat. Informal dress is in order at most times. At dances, ladies usually are in evening or afternoon dresses. There are some occasions where formal attire (white uniform or summer tuxedo) is required.

Civilian clothes are permitted when off duty. On duty, tropical khaki long, or short, is the customary uniform for officers and CPOs. The uniform for enlisted personnel below CPO is undress whites B, or tropical whites long, or short. Uniforms for inspection or change of command ceremony vary from full dress white to service dress khaki for officers and CPOs. The uniform for enlisted personnel below CPO is service dress white.

Blues are never required, but should be brought along in anticipation of stateside emergency leave. The Navy Exchange has basic items of clothing, underwear and outerwear for sale; selection is limited.

Clothing of excellent quality is available in a number of good local stores. Considerable difficulty will be encountered in obtaining certain unusual sizes of footwear. Odd sizes in clothing will usually not be available. This difficulty is more often encountered with women's and children's apparel. Ladies can find some excellent dressmakers, although it may take some looking. Cloth by the yard is unusually reasonable, although care must be taken to insure that the material is not "second."

Prices on clothes are not appreciably different from stateside. Shopping by mail order will be found to be quite satisfactory. Service is excellent in all respects. Your favorite mail order house will be just as dependable in Puerto Rico as in the States and will often meet needs that cannot be satisfied in local stores.

Laundry and dry cleaning service is provided on the naval station at moderate cost. There are also a number of commercial establishments offering such service.

Food—Commissaries carry an adequate line of almost all foods. Shortages occur in certain items from time to time when there is a long period between supply ship arrivals, but stocks are generally adequate. Pasteurized fresh milk is delivered by local dairies at a moderate price. Local fruits and vegetables are plentiful in season and are reasonable in price. There are many well stocked

supermarkets in the San Juan area.

Banking—Dependable banking concerns, including branches of large international banks, are located in San Juan. Reliable, locally-owned banks are operated in most communities. U. S. currency is used. Continental banking can be easily utilized. Airmail from and to Puerto Rico is excellent and compares with coast-to-coast service in the U. S.

Recreation—Many opportunities exist for recreation and amusement. Such sports as baseball, tennis, swimming, basketball, golf, fishing, bowling and others are year-round activities. There are movies on the station every night. Dances, formal and informal, are arranged at the EM, CPO and officers' clubs at frequent intervals. Camera enthusiasts will find good subjects for color slides and movies. There are outdoor swimming pools on the San Juan Naval Station at both the EM and officers' clubs. There is salt water bathing at the Army and Navy beach in San Juan and at other spots along the coast.

Fishing, both deep sea and fresh water, is excellent. Numerous mountain lakes and streams have an abundance of bass and catfish. In the San Juan area, at Fort Buchanan and Fort Brooke are two nine-hole golf courses; at Ramey Field and at Roosevelt Roads (80 and 50 miles distant, respectively) are two more courses. Golf clubs can be checked out for 24 hours at a time through Special Services and at all service golf courses.

Ramey and Roosevelt Roads have stables where riding horses can be hired or purchased. Trips to other islands at very reasonable commercial air rates are available.

Automobiles—An automobile is very handy and in some areas practically a necessity. Bring a small car if available. It is advisable to have a new car, or a car in good condition undercoated; the weather and climate cause the body of an automobile to deteriorate rapidly. Have repairs such as front end alignment, wheel balancing, headlight adjustment, radiator flushing, generator brushes renewal, muffler and tail pipe renewal, completed before shipping.

Major repairs are very expensive and the quality of workmanship is questionable. If you have a car that will last for your tour of duty in the area with only minor repairs, bring it instead of a new one. Roads are crowded, and except for a few, rough; the speed limit is low, so you do not need a high-powered automobile. Public insurance (liability) is required to operate a car on the Naval Station. Insurance rates are approximately double stateside rates.

Your stateside driver's license is valid in Puerto Rico for three months after arrival. Dependents must obtain Puerto Rico drivers' licenses. A non-resident decal will be issued for your car allowing you to use your continental plates. This decal is good for your entire stay in Puerto Rico.

No taxes are imposed on cars shipped at government expense. Owing to transportation charges and the insular tax, cars purchased on the island are expensive. If you buy a used car on the island, you must pay the insular tax.

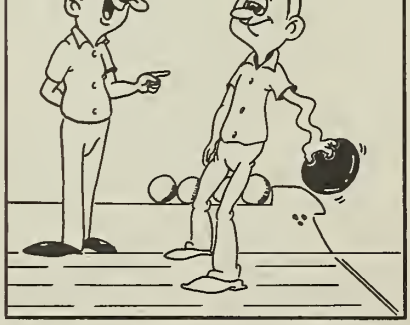
Medical Care—The station dispensary at Naval Station San Juan offers limited outpatient care including prenatal care for naval dependents. Those requiring inpatient treatment are hospitalized at the Rodriguez U. S. Army Hospital at Fort Brooke, San Juan. This hospital has all normal facilities for medical and surgical services.

A hospital has been opened at Naval Station Roosevelt Roads, and provides outpatient and inpatient care for dependents, including maternity care. Dental care is provided to dependents on a facilities available basis.

The hospital at Ramey Air Force Base offers complete dental, medical and surgical care for all Naval Facility personnel and dependents.

That's duty in Puerto Rico. Have a good tour.

All-Navy Cartoon Contest
Alfred B. Castro, SK2, USN



"How do you manage that magnificent hook, Elmer?"

List of New Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Lists of new movies are reported as they become available.

The Horror Of It All (2726): Suspense Comedy; Pat Boone, Erica Rogers.

The Kidnappers (2727): Suspense Drama; Burgess Meredith, William Phipps.

Unearthly Stranger (2728): Science Fiction; John Neville, Gabriella Licudi.

North West Mounted Police (2729); Gary Cooper, Madeleine Carroll (Re-issue).

The Thin Red Line (2730) (C): Melodrama; Keir Dullea, Jack Warden.

Conquest Cochise (2731): Action Drama; John Hodiak, Robert Stack (Re-issue).

Where There's Life (2732): Bob Hope, Signe Hasso (Re-issue).

Cleopatra (2733): Henry Wilcoxon, Claudette Colbert (Re-issue).

Stage to Thunder Rock (2734) (C) (WS): Western; Barry Sullivan, Marilyn Maxwell.

The Killers (2735): Melodrama; Lee Marvin, Angie Dickinson.

Young and Willing (2736): Drama; Virginia Maskell, Paul Rogers.

The McConnell Story (2737): Alan Ladd, June Allyson (Re-issue).

Zulu (2738) (C) (WS): Drama; Stanley Baker, Jack Hawkins.

The Long Ships (2739) (C) (WS): Melodrama; Richard Widmark, Sidney Poitier.

Julie The Redhead (2740): Comedy; Daniel Gelin, Pascale Petit.

The Star Maker (2741): Musical; Bing Crosby, Louise Campbell (Re-issue).

Robinson Crusoe On Mars (2742) (C) (WS): Science Fiction; Paul Mantee, Victor Lundin.

Marnie (2743): Drama; Tippi Hedren, Sean Connery.

The Miami Story (2744): Barry Sullivan, Luther Adler (Re-issue).

Illegal (2745): Edward G. Robinson, Nina Foch (Re-issue).

Questions on Overseas Duty Answered for You and Your Family

Heading for a tour of overseas duty? Here are the latest changes on dependents' travel, shipment of household gear and overseas tour lengths.

Before you become engrossed in travel preparations, find out first if you can have your dependents travel with you. *Joint Travel Regulations* (paragraph 7000) spells out who is authorized and who is not.

By Navy definition an "authorized" dependent is one entitled by law to travel overseas at government expense upon the permanent change of station of his or her sponsor (that's you), and authorized by the appropriate military commander to be present in a dependent status for the purpose of logistical support within his command.

In general, your dependents are entitled to overseas transportation at government expense from your old station to your new command, unless:

- You are in pay grade E-4 with less than four years' service, or in pay grade E-3, E-2, or E-1
- A dependent concerned is a member of the uniformed service on active duty on the date your change of station orders become effective.
- Dependency does not exist on the effective date of your change of station orders.
- Dependents concerned receive some other type of travel allowance from the government in their own right.
- If dependent parents, they do not reside in your household (unless approved by competent authority).

The fine print of *Joint Travel Regulations* contains a number of other clauses that could disqualify dependents from transportation at government expense, but these points do not arise too often.

The general policy on the overseas movement of Navy dependents and household effects is contained in BuPers Inst. 1300.26D, which also lists the lengths of tours in various overseas areas and indicates areas in which dependents are not allowed.

Even though your dependents may be authorized for transportation overseas, a number of other considerations must be met before they will actually be allowed to travel. The first, of course, is whether or not your dependents are allowed in the area to which you are ordered. If they are, you can start making plans. If they aren't, better plan on a period of separation from your family. (Normally the standard tour in areas not open to dependents ranges from 12 to 18 months. Most such tours are for 12 months.)

If this is your case, you'll be entitled to Family Separation Allowance. For further details on this, check the Rights and Benefits issue of ALL HANDS (December 1963) and SecNav Inst. 7220.46.

If dependents are to accompany a Navyman, before being presented with standard orders directing his transfer, he will be interviewed by a representative of his commanding officer to determine his and his dependents' fitness for residence in the overseas area concerned. (Does the area have suitable medical facilities to handle any special needs of the dependents? Are the servicemen and his dependents worthy representatives of the U. S.?) If for some reason or other, the interview produces evidence that it might not be wise to transfer a particular individual to the overseas area indicated on the initial orders, his CO will bring the matter to the attention of the Chief of Naval Personnel (via the appropriate Enlisted Personnel Distribution Office for EMs.)

The Chief of Naval Personnel will weigh the facts and notify the CO to handle the problem in one of the following ways: Send the man without his dependents on a "short tour" basis; (or) send him and his dependents, whether or not physically qualified; (or) cancel the orders.

Here's another standard transportation ruling that could block dependents' travel: Their transportation to overseas station will not be authorized unless you have sufficient obligated service to complete the standard tour for that area. If you're going to a ship or some mobile-type unit which is homeported overseas, your dependents will not be authorized travel to the home port unless you have at least one year of obligated service and can reasonably be expected to serve for one year after your dependents arrive.

In no event are your dependents moved overseas at government expense if your tour would be less than one year after they arrive.

The one-year mininum also applies to situations involving changes of home ports or bases between U. S. and overseas. In other words, your dependents would not be authorized transportation to your overseas home port if it is expected that your ship will change home ports within one year after your dependents arrive.

Before you leave your present duty station you will choose whether you want to serve your overseas tour with your dependents or not. If you choose to serve without your dependents, you also can request a 12-month tour.

To get this short tour you must

All-Navy Cartoon Contest
William R. Maul, CTCA, USN.



"Basically, it's a good report, and I have only a few small criticisms . . ."

All-Navy Cartoon Contest
Samuel C. Richardson, PHAN, USN



"When Jones put in for an exchange of duty, I never thought. . . ."

submit a request before you depart your present station or within 30 days after you report to your new command. Your request will be weighed against the needs of the service and, if approved, your tour completion date will be set for 12 months or longer.

To be qualified to receive the Family Separation Allowance, your orders must contain a statement that says, in effect, dependents' travel to your overseas duty station is not authorized at government expense.

You still are privileged to change your mind once you arrive at your new command. Even if you already are serving the 12-month tour and you want the longer "with dependents" tour, you may submit a request to the Chief of Naval Personnel. It will be approved only if it is in the best interests of the service, you have the obligated service and you are otherwise qualified.

Tour mininums apply whether your dependents accompany you overseas or join you there later. If you do report without your dependents, and their movement is authorized later, your CO will, upon their arrival, request that your tour completion date be adjusted so it falls within the "with dependents" category, computed from the date you departed the U. S.

If insufficient obligated service blocks your dependents' transportation, you can remedy this by reenlisting, executing an agreement to extend your enlistment, or by agreeing to remain on active duty. Here's a tip: If you agree to extend your enlistment for the primary purpose of acquiring sufficient obligated service to complete an overseas tour, it may be conditional—to become effective *only* if the entry of your dependents into the area is approved. You should make sure that this is entered in your service record. *BuPers Manual*, Article C-1407(3), shows how it's done.

If you have completed more than 17 years' service, before you are ordered overseas you must agree to remain on active duty for a period sufficient to complete the prescribed tour for the area concerned. If you desire transfer to the Fleet Reserve or Retired List while overseas, your request will be approved for the date that your "with dependents" tour is completed. (There are exceptions, such as bona fide hardship cases.)

If your dependents are "unauthorized"—that is, not eligible for transportation at government expense—you are advised not to bring them to your overseas station commercially. If you do, you'll have to pay for their return to the U. S. when your tour is completed. However, "unauthorized" dependents are furnished medical service, as provided by law, and are permitted to use Exchange and commissary facilities where available for authorized dependents.

You can have your dependents recognized as command-sponsored or authorized when they arrive overseas in a tourist status. First you must be qualified (be of eligible pay grade and have sufficient obligated service to complete an accompanied tour). Next you must apply for it. It's then up to your CO.

Information pamphlets on living conditions overseas have been compiled by the Navy for most locations. A copy of the pamphlet which applies to your area is usually forwarded to you with your orders. They may also be obtained from the Bureau of Naval Personnel (Pers G 221), Washington, D.C.

The pamphlets spell out such things as entry approval requirements, types of quarters available, and approximate waiting period for government housing.

You'll find the pamphlet titled "It's Your Move" helpful for additional information concerning your transfer overseas. This is published by the Bureau of Supplies and Accounts, and may be obtained from your Household Goods Shipping Office.

When you receive orders to overseas duty, you are encouraged to communicate with your new command well in advance of transfer date. If you let your prospective CO know about your housing requirements, approximate date of arrival, and ask questions about the things that confuse you, your transfer will go smoothly and you'll have a good idea of what furnishings you should ship and what you should place in storage.

Below is a roundup of standard overseas tour lengths. A request for an extension may be granted by the Chief of Naval Personnel for a maximum of one year. Such an extension *may* be granted if it is considered to be in the best interests of the Navy, but the total overseas tour, as extended, will not normally exceed 48 months. As might be expected, extensions are contingent upon the area and the number of individuals on Seavey waiting for the duty.

Time creditable to your overseas tour begins the month you depart the U. S. (except for Alaska and Hawaii) and ends when you return upon permanent change of station. Locations indicated by an asterisk are areas in which dependents are permitted only when government quarters are available. Tour lengths for attache personnel are found in the table immediately following this one. Any changes will be listed periodically in ALL HANDS Magazine.

NOW HERE'S THIS

Wave Off and Wave On

The term "wove-off" meons one thing to pilots todoy, but it had a different meoning far ane destroyerman during WW II. Seoman Jahn Urtchak received, consecutively, a wave-off and a wove-on, ond he wosn't in o plone.

Hoving finished evening chaw, Urtchok wos moking his woy aft to the crew's quorters during foul weather. Suddenly o mountoinous wave hit the vessel ond swept him overboord. The woves were like three-story buildings, he loter recolled.

A second destroyer, with her seorchlight troined on the seaman, closed in, haping to throw him a line. As the stern slid by, Urtchak wos lifted by o wove, slommed an the fontoil af the destroyer ond grobbed by o seomon wha had been oiding in the rescue efforts.

When it wos all aver—40 minutes ofter it begon—Urtchok hod pioneered an at-sea tronsfer pracess thot did nat require use of o highline.



Country or Area	Tours in Months Accompanied by Dependents	All Others
Alaska		
Aleutian Peninsula and Islands West of 162nd Meridian including Adak, Attu and Dutch Harbor; Point Barrow	18	12
Anchorage Area including Elmendorf AFB and Fort Richardson	36	24
Bethel, Kodiak Island, Nome	24	12
Big Delta Area including Fort Greely, Kenai-Whittier Area including Wildwood station, Juneau	24	18
Fairbanks Area, including Eielson AFB, Ladd AFB and Fort Wainwright	30	18
Fire Island. Clear, Murphy Dome	N/A	12
Antarctic Region	N/A	Indef.
Argentina	36	24
Aruba	24	18
Ascension Island	N/A	12
Australia (except as indicated)	36	24
Alice Springs	24	18
Austria	36	24
Azores	24	18
Bahamas		
Grand Bahama Island, San Salvador, Turks and Caicos	N/A	12
Eleuthera	24	18
Bahrein Island	15	12
Belgium	36	24
Bermuda	36	24
Bolivia	24	18
Brazil (except as indicated)	36	24
Fortaleza	N/A	18
Recife, Salvadore, Santa Cruz	24	18
Burma (except as indicated)	24	12
Rangoon	24	14
Cambodia	24	12
Canada		
Labrador (except as indicated)	24	12
Goose AFB	24	15
Metropolitan Areas	36	24
Newfoundland		
Argentia	24	18
St. Johns	36	24
Stephenville	30	18
Other areas	24	12
Chichi Jima	18	12
Chile	36	24
Christmas Island	N/A	12
Colombia	36	24
Congo (Leopoldville)	24	12
Corsica	N/A	18
Costa Rica	24	18
Cuba		
Guantanamo	N/A	12
Cyprus	24	18
Dahomey	24	12
Denmark	36	24
Dominican Republic	36	24
Ecuador	24	18
Egypt	36	24
El Salvador	36	24
Eniwetok	N/A	12
Ethiopia-Eritrea (except as indicated)	24	18
Asmara	30	18
Massawa, Harrar	N/A	12
France	36	24
Germany	36	24
Greece		
Athens and vicinity	30	18
Crete	24	18
Soudha Bay	N/A	12
Other locations	N/A	12
Greenland	24	12
Guam	24	18
Guatemala	36	24
Haiti	36	24
Hawaii	36	24
Honduras	24	18
Hong Kong	36	24
Iceland	24	12
India	24	12
Indonesia	24	14
Iran (except Teheran)	24	12
Teheran	30	18
Iraq	24	18
Italy (except as indicated)	36	24
San Vito, Brindisi, Sigonella	24	18
Mt. Venda, Mt. Corna	N/A	18
Naz Sciaves, Zello, Mt. Calverina, Mt. Pizzoz, Mt. Grappa, Mt. Torara	N/A	15
Cima Gallina, Mt. Paganella, Mt. Cimone	N/A	12
Ivory Coast	24	12
Iwo Jima	N/A	12
Japan (except as indicated)	36	24
Wakkanai	24	15
Kobe, Akashi, Osaka	24	15
Akizuki-Kure, Kokura Moji	24	13
Fuji Maneuver Area	N/A	13
Isolated Areas	N/A	12
Johnston Island	N/A	12
Korea	24	13
Kwajalein	18	12
Laos	24	12
Liberia	24	12
Libya (except as indicated)	24	12
Tripoli	36	18
El Uotia, Misurata	N/A	12
Mahe Island, Seychelles	24	13
Mali	24	12
Malta	24	12
Mexico	36	24
Midway Island	18	12
Morocco		
Ben Guerir Area	24	12
Casablanca Area including Nouasseur	36	24
Marrakech Area	30	18
Port Lyautey Area	24	12
Sidi Slimane	24	12
Netherlands	36	24
New Zealand	36	24
Nicaragua	36	18
Niger	24	12
Norway	36	24
Pakistan (except as indicated)	24	18
Lahore	N/A	15
Peshawar	24	15
Palestine (UN Truce Supervisory Organization)	24	12
Panama (including Canal Zone)	36	24
Paraguay	24	18
Peru	36	24
Philippine Islands (except as indicated)	24	18
Mindanao, Balanga Area (Bataan), Laoag, Lubang	N/A	12
Wallace Air Station	N/A	15
Portugal	36	24
Puerto Rico	36	24
Ryukyus Islands	30	18

Country or Area	Tours in Months Accompanied by Dependents	All Others
Saipan	24	18
Saudi Arabia	18	12
Senegal	24	12
Spain (except as indicated)	36	24
El-Ferrol, Cartagena, Sonseca	24	18
Villatobas, Constantina, Inoges, Rosas, Alcoy, Elizondo	30	18
Balearic Islands, Gorramendi	N/A	15
Santiago, Adamuz, Ciudad Real	N/A	18
Surinam	24	18
Taiwan (except as indicated)	24	15
Isolated locations	N/A	12
Thailand (except Bangkok)	24	12
Bangkok	24	18
Trinidad and Tobago	24	18
Turkey		
Ankara, Istanbul and Izmir	30	18
Adana, Sile, Golcuk and Karamousel	24	18
Trabzon, Samsum	N/A	15
Other Areas	N/A	12
United Kingdom (except as indicated)	36	24
Londonderry (Ireland); Edzell, Holy Loch, Thurso (Scotland)	24	18
Upper Volta	24	12
Uruguay	36	24
Venezuela	36	24
Vietnam	24	12
Virgin Islands	36	24
Wake Island	18	12
West Indies		
Antigua, Barbados, Anguilla	24	18
St. Lucia	N/A	12
Yugoslavia	24	18

Society of Sponsors Offers Prep School Scholarships

The Society of Sponsors of the United States Navy will award several scholarships to young men who wish to study at preparatory schools to prepare themselves for the United States Naval Academy. Generally speaking, the awards will cover all the students' school expenses.

Applications received from the sons of deceased, retired and active duty Navy and Marine Corps personnel will receive first consideration.

Second preference will be given to the sons of personnel of the other military services, after which applications from the sons of civilians will be considered.

Applicants must be acceptable to the Scholarship Committee of the Society of Sponsors as to character, aptitude for the naval service, scholastic standing and physical fitness.

The financial situation of the applicant's parents or of the applicant himself, if he is an orphan, must be such as to warrant the expenditure of the Society's funds.

Application blanks may be obtained by writing to Mrs. Roy S. Benson, Quarters O, Navy Yard, Washington 25, D. C. There is no established deadline for receipt of the applications.

Report on Unitas V

Eleven warships of three nations (Uruguay, Argentina and the U. S.) went to sea from Montevideo, Uruguay, to begin the third phase of Operation Unitas V. This consisted of joint antisubmarine warfare exercises designed to train the navies of these countries to work together in the defense of the western hemisphere.

Six of the 11 ships were Argentine: the aircraft carrier ARA (Armada Republica Argentina) *Independencia;* the destroyers *Brown* (D 20), *Espora* (D 21) and *Rosales* (D 22); the submarine *Santiago del Estero* (S 11); and the oiler *Punta Medanos* (B 18). Uruguayan ships included the two destroyers *Uruguay* (DE 1) and *Artigas* (DE 2); the U. S. ships in *Unitas V* are the frigate uss *Norfolk* (DL 1), the escort ship *John Willis* (DE 1027) and the submarine *Odax* (SS 484).

During the five-day Montevideo visit, the *Unitas V* band was flown by the Uruguayan Air Force to the northern towns of Rivera and Artigas. There they played concerts for more than 15,000 people.

In Artigas, the band was met by the President of the state legislature and delegations of students who escorted them from the airport to the city stadium in a motorcade. The audience in the stadium was the largest in the city's history according to the President.

Following the regular performance in the towns, the band led a parade to the International Plaza on the Brazilian-Uruguayan border where more than 1000 persons of both countries joined them in the impromptu performance.

Meanwhile in Montevideo, hundreds of children from the city's orphanages were given special parties aboard the ships. A group of 30 volunteers from the U. S. vessels spent their time ashore repainting and repairing a local school.

About 150 miles to the south, in Mar Del Plaza, Argentina, some 5000 guests toured uss *Odax* (SS 484). *Odaxmen* played Argentine military men in a softball game.

Attention, Attache Personnel

Here's a list of overseas tour lengths for Naval Attache personnel.

24 Months

Afghanistan	Laos
Bolivia	Lebanon
Burma	Liberia
Cambodia	Malaya
Ceylon	Nicaragua
Czechoslovakia	Pakistan
Ecuador	Poland
Ethiopia	Rumania
Hungary	Saudi Arabia
India	Singapore
Indonesia	Taiwan
Iran	Thailand
Israel	U. S. S. R.
Jordan	Vietnam
Korea	Yugoslavia

36 Months

Argentina	Hong Kong
Australia	Italy
Austria	Japan
Belgium	Mexico
Brazil	Morocco
Canada	Netherlands
Chile	New Zealand
Colombia	Norway
Costa Rica	Paraguay
Cuba	Peru
Denmark	Philippines
Dominican Republic	Portugal
Eire	Spain
El Salvador	Sweden
Finland	Switzerland
France	Turkey
Germany	Union of South Africa
Greece	United Arab Republic
Guatemala	United Kingdom
Haiti	Uruguay
Honduras	Venezuela

BOOKS

KEEPING UP WITH THE WELL-READ NAVYMAN

FROM BLUE-EYED SCALLOPS to World War II—that's the range of variety in this month's selection of books to be found in many ship and station libraries. The books were selected by BuPers' busy Library Services Branch.

To the youngsters in their early twenties World War II seems almost as far back in time as, say, the Spanish-American War. Quaint maybe, but not really real. To those of us old timers who were around then, it has special qualities of poignancy.

These emotions and others too, will undoubtedly be aroused by General of the Army Douglas MacArthur's ***Reminiscences.*** Although he covers his entire career from his West Point days to Korea, the bulk of his thoughts are concerned with World War II, the occupation of Japan, and his conflict with President Truman over policies concerning the fighting in Korea. Appointed Supreme Commander of the Allied Forces in the Southwest Pacific, General MacArthur was the driving force behind the campaign to push the Japanese from their strongholds at Bataan, Corregidor and New Guinea. His viewpoint of these campaigns will be of considerable interest to those Navymen who did the pushing at considerably lower levels of command, as will be the General's comments concerning such Navy greats as Nimitz and Halsey.

If World War II appears to be in the distant past, what can we say of World War I? It's not necessary to say much because countless authors have, within the past year or so, said just about everything needed. ***Dardanelles Patrol,*** by Peter Shankland and Anthony Hunter is one of the better efforts. This is the story of the British submarine *E II* and what happened when it finally managed to penetrate the Dardanelles Straits to the Sea of Marmara. Seems that, although its skipper was of the genius type, he persisted in being jinxed. As a for-instance, when he finally got going good he managed to score against five large steamers, two smaller ones, and a gunboat. All very well, but in doing so he had managed to entangle himself with a cable and was pulling a mine along with him, bobbing about 10 yards from the conning tower. Couldn't surface because of daylight and enemy gun emplacements. Enough to set a chap's teeth on edge at times.

A more current struggle—although possibly less widely understood—is the collective latter-day tumult in the East, including the wars in Southeast Asia. Our greatest barrier to comprehending the situations in this area is our lack of acquaintance with Asian politics, which are derived from historical and socioeconomic conditions very different from out own. *New York Times* correspondent Robert Trumbull, a 17-year veteran of Far Eastern beats, helps break down this barrier with his experienced, understanding interpretation of these political enigmas in ***The Scrutable East.*** While discussing the peculiarly Asian characteristics and attitudes that mold politics in the different countries, Trumbull analyzes situations in Indonesia, Malaysia, Burma, the Philippines, Thailand, Cambodia and Vietnam. He demonstrates the problems faced by the U.S. and how we are meeting these problems while facing Communist China on the other end of the political see-saw.

Moving from politics to science and biology, three of this month's selections can help us broaden our knowledge of the underseas world. ***Ocean Sciences,*** written by 18 eminent men in selected fields and edited by CAPT E. John Long, USNR (Ret), delves into such subjects as military, marine and polar oceanography, marine biology and geology, and charts and maps of the seas—with a look at the history and future of oceanography. This illustrated book was planned to fill the needs of students, naval officers and an interested public who are attempting to broaden their understanding of the oceanic properties and the sciences related to the study of oceanography. It fills a noticeable gap between popular literature and technical writing.

Two years ago Euell Gibbons' popular book ***Stalking the Wild Asparagus*** described how to forage for food in the woods and fields of America. Now, in ***Stalking the Blue-Eyed Scallop,*** Gibbons turns his talents to the seashore and tidal waters, to tell all about the marvelous food available for the taking if you know how to go about it and what to look for. He explores the coasts from Maine to Florida, Alaska to lower California and along the Gulf of Mexico. Crabs, clams, mussels are here, as are countless exotic but readily available species of seafood—beach plants that can be used for salads and desserts, edible seaweed for aspics and relishes, for instance—and the many inshore fish that can be caught from wharves, piers and docks. Throughout the book Gibbons has made a special point of emphasizing seafood that can be cleaned and cooked right then and there if desired, with a minimum of fuss. With a copy of this book in one hand and a hook in the other, the beachcomber may never need to visit his local grocer.

If you prefer looking at fish rather than eating them, Craig Phillips' new book ***The Captive Sea*** tells you how to plan, build, stock and run a major aquarium. This is a delightful combination of science and personal adventure, told enthusiastically and with a light touch by a professional marine biologist and former curator of the Miami Seaquarium. It includes interesting behind the scenes descriptions of the special talents and temperaments it takes to collect and display a large variety of sea creatures. Also, there are many anecdotes about the habits, idiosyncrasies and reactions of a host of aquatic and land creatures. A useful last chapter reviews the major aquaria in the United States and the most important ones elsewhere.

For fiction, ***The Kingdom of Illusion*** by Edward R. F. Sheehan is a tragi-comedy about the state of diplomatic affairs in the Middle East during the late 1950s. In concocting this absorbing and entertaining hodge-podge of political intrigues and governmental ups and downs, Sheehan has thrown in everything from a brilliant Bedouin prime minister, whose fondest fantasy is to address the House of Lords, to a rock and roll Zen-oriented lute player.

Corridors of Power, by British writer C. P. Snow, is a theme about Britain's position in the thermonuclear arms race. It examines the reflexes of decision-making and dramatically tells, in personal terms, what men of action do and what they are like. How much can one man do, and how much of our lives is settled for us in the corridors of government office buildings? These are matters of great concern to author Snow.

DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionolly meritorious service to the Government of the United Stotes in o duty of greot responsibility . . ."

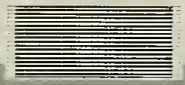
★ GRENFELL, ELTON W., Vice Admiral, USN, for service during the period August 1960 to September 1964 as Commander Submarine Force, Atlantic Fleet, and advisor for *Polaris* operations to the Commander in Chief Atlantic. As a result of his sound judgment and superior planning ability, Atlantic Fleet submarines conducted operations of inestimable value to the U. S. in the Atlantic, Arctic and Indian Oceans and in the Mediterranean Sea. His dynamic leadership resulted in the development of highly trained crews to man *Polaris* submarines which were maintained at an unprecedented degree of readiness, thus making an extremely important contribution to the nuclear deterrent posture of the United States.

★ STROOP, PAUL D., Vice Admiral, USN, as first chief of the Bureau of Naval Weapons during the period 9 Sep 1959 to Oct 1962. VADM (then RADM) Stroop welded the Bureau of Ordnance and the Bureau of Aeronautics into a smoothly-functioning Bureau of Naval Weapons. He effectively solved some of the most complex management problems, causing the merger of the two bureaus to be completed seven months ahead of schedule. Operational support was not impaired at any time during this period. VADM Stroop's appreciation of both human and technical problems involved was a major factor in the smoothness with which the consolidation was effected. His management of the Bureau resulted in great strides being taken to reduce the lead time between the expression of an operational requirement and delivery to the combat forces of fully developed and effective weapons systems. His dedication to reducing the cost of weapons systems acquisitions has been directly reflected in the Department of Defense cost reductions.

★ SYLVESTER, JOHN, Vice Admiral, USN, as Deputy Chief of Naval Operations (Logistics) from August 1960 to August 1964. VADM Sylvester was a principal force in providing improved naval logistical support to the Fleet and the shore establishment. Under his direction the conception and development of the Maintenance Management System provided increased readiness and efficiency in the use of material resources. His efforts in obtaining the required legislative and other action necessary to provide funds were instrumental in assuring the best possible Fleet support under present budgetary limitations. Planning, development, management, and use of the Navy's real property have been greatly improved due to VADM Sylvester's efforts in the Shore Facilities Planning System.

Gold Star in lieu of Second Award

★ AUSTIN, Bernard L., VADM, USN, for service as President, U.S. Naval War College, Newport, R.I., from July 1960 to July 1964. An inspiring leader and educator, VADM Austin drew upon his great wealth of wisdom and experience in a dedicated effort to enrich the postgraduate education of students at the Naval War College in the field of maritime strategy and its relationship to overall national and allied objectives and strategy. Among his numerous achievements during this period were his pursuance of an optimum use of the Navy Electronic Warfare Simulator; substantial contributions to the cause of international understanding and cooperation; contacts with senior foreign officers attending the Naval Command Course; and his acute awareness of the importance of interservice cooperation and understanding by promoting these ends at every opportunity.



LEGION OF MERIT

"For exceptionolly meritorious conduct in the performance of outstonding service to the government of the United States . . ."

★ CAMPBELL, ROBERT L., Rear Admiral, USN, for service from January 1962 to October 1964 as Deputy Chief of Staff, Headquarters U. S. European Command. During this period, RADM Campbell exercised great professional skill and administrative ability in planning, organizing and coordinating many of the diverse activities of the U. S. European Command. Under his guidance, the joint staff achieved unity of effort and effective coordination in the conduct of various studies of major importance to the command. Through his improvement of the command inspection program for MAAGs/Missions, and his cordial relationship with high military and civilian officials of the host countries, he contributed immeasurably to the success of the Military Assistance Program in those countries

★ COATES, Leonidas D., Jr., RADM, USN, for services during the period June 1961 to June 1964 as Chief of Naval Research. During this period of dynamic evolution of naval ships, aircraft, associated equipment and technology, RADM Coates has made major contributions to the scientific and engineering achievements of the Office of Naval Research. Exercising outstanding professional skill and resourcefulness, he has insured the maximum scientific and technological advancement of the Navy, and has been responsible for a high order of enthusiasm and morale among personnel in the offices and laboratories under his cognizance. In addition he has insured the most effective utilization of limited resources of men and money.

★ FRANKEL, Samuel B., RADM, USN, for service as Chief of Staff of the Defense Intelligence Agency from 30 Sep 1961 to 30 Jun 1964. As one of three general/flag officers selected by the Secretary of Defense to activate and establish a new, integrated intelligence agency, RADM Frankel was responsible for coordinating the planning, organization and operation of the agency from its initial inception to its present status as the principal intelligence instrument of the Department of Defense. Exercising brilliant leadership, outstanding professional competence, and a vast knowledge of intelligence and its national functions, he was eminently successful in carrying out his extremely sensitive and important assignment as Chief of Staff. Through his distinguished service and accomplishments during this period, RADM Frankel contributed immeasurably to the successful establishment and operation of the Defense Intelligence Agency.

★ MOMSEN, Charles B., Jr., CAPT, USN, for service during the period August 1958 to June 1964 while serving at the Office of Naval Research, Washington, D.C. As Director, Undersea Programs, Naval Applications Group, CAPT Momsen initiated and sponsored research on projects which have resulted in major contributions to the Navy's operational capabilities, scientific advancement, and national prestige. Through his initiative, resourcefulness, perseverance, and imagination, he has brought to fruition radically new concepts which contribute directly to the Navy's solutions to overcoming antisubmarine problems. His

clear visualization of the utility of these concepts has resulted in advancing our research capabilities and in expanded efforts by the material bureaus that will improve operational capabilities of surface ships and submarines. Exercising sound judgment, keen foresight, and organizing ability, CAPT Momsen was personally responsible for the Navy's Deep Research Vehicle Program which led to the construction of *Alvin*.

★ POWERS, Robert D., Jr., RADM, USN, for service from August 1960 to May 1964 as Deputy Judge Advocate General of the U. S. Navy. As a leading national authority in the field of international law, RADM Powers has written outstanding articles and opinions which have become persuasive and authoritative precedents in the field of the law of the sea and its relationship to the preservation of United States seapower and military posture. Widely acclaimed for his realistic and practical assessment of crises which have confronted the United States during the recent stages of the cold war, he played a major role in connection with the Cuban quarantine of 1962 by drafting a proclamation which was ultimately announced to the world by the late President John F. Kennedy and which triggered the quarantine. In addition, he drafted the regulations which the United States put into force to ensure that all ships of all nations not carrying offensive weapons to Cuba would continue to enjoy their lawful freedom to reasonable use of the high seas.

★ RONNE, FINN, Captain, USNR (Ret.), for service as organizer, leader, and pioneer in Antarctic exploration throughout a distinguished career which encompassed six journeys to the Antarctic, the first of which was with the Admiral Byrd expedition of 1933-35. A courageous, resourceful, and determined leader, CAPT Ronne has been directly responsible for a vast accumulation of geographic and scientific knowledge culled from his several expeditions to Antarctica. Particularly significent was the Ronne Antarctic Research Expedition of 1946-48. During this period, in the face of severe financial and material limitations, CAPT Ronne led a small Antarctic expedition which delineated the last unknown coastline in the world; conducted investigations in 11 branches of science; mapped known and previously unknown land totaling 450,000 square miles; discovered islands and mountain ranges in the newly found "Edith Ronne Land;" and identified at least 100 new geographical features.

* WILLIAMSON, Francis T., RADM, USN, for service during the period May 1962 to April 1964 as Chief, Navy Section, Joint United States Military Mission for Aid to Turkey. Exercising a high degree of professional competence, foresight, and diplomacy, RADM Williamson was instrumental in increasing the combat effectiveness of the Turkish Navy by instituting destroyer and submarine overhauls, and patrol and amphibious craft building in Turkish shipyards; establishing a modern integrated supply system; initiating new training devices and systems; and realizing savings of over seven million dollars through disposal of excess material, realistic fund utilization, and the phasing out of excess advisory effort. In addition, he assisted in the establishment of the Turkish Navy Hydrographic Office.

Gold Star in lieu of Second Award

* HAYNSWORTH, Hugh C., Jr., RADM, SC, USN, for service during the period June 1961 to May 1964 while serving as Commanding Officer of the Naval Supply Centers at Norfolk, Va., and Oakland, Calif. In revitalizing the management engineering programs at both of these naval supply centers, RADM Haynsworth succeeded in decreasing the size of the work force, in spite of an over-all increase in workload, with a resultant annual savings to the government of approximately $4,500,000. In addition, by installing the latest automated materials handling equipment, he has not only improved responsiveness to fleet requests, but has also generated an additional recurring annual savings of $900,000. Through his outstanding efforts in the field of Industrial Relations, RADM Haynsworth has instilled in his personnel the loyalty, alertness, and enthusiasm which have been of inestimable value in achieving the desire for each member of his organization to render maximum service to the fleet.

Gold Star in lieu of Fourth Award

* KEITH, Robert Taylor Scott, RADM, USN, for service during the period April 1960 through January 1964 as Commander Cruiser-Destroyer Force, U. S. Pacific Fleet; Senior Member of the U. N. Command Military Armistice Commission Korea; and Commander FIRST Fleet. RADM Keith conceived and initiated a major reorganization of CRUDESPAC, the new Cruiser-Destroyer Flotilla concept, which significantly and materially improved combat readiness in tactical deployment and achieved the best balance of capabilities available. While serving as senior member of the U. N. Command Military Armistice Commission in Korea, he was charged with negotiating with representatives of Communist China and North Korea in any matter that was brought before the Commission. During this period, he exercised the utmost ability, tact, and grasp of international affairs in what can best be described as one of the world's most difficult political arenas. In his role as Commander FIRST Fleet, RADM (then Vice Admiral) Keith displayed brilliant leadership and professional competence in maintaining the Fleet at a high level of combat readiness.



"For heroic conduct not involving actuol conflict with an enemy . . ."

★ ADAMS, WILLIAM T., Fireman, USN, posthumously, for heroism on 4 Mar 1964 while serving on board the service craft *YOG 89*. Adams and three other men were engaged in a routine safety inspection of carbon dioxide containers. While disconnecting the last container, the releasing mechanism was inadvertently activated and the compartment filled with the carbon dioxide. Adams and two men struggled out of the compartment. Apparently realizing that another man was still there, Adams, although fully aware of the personal dangers involved, returned to the compartment where he succumbed in his attempt to rescue his shipmate.



"For heroic or meritorious achievement or service during milltary operations . . ."

★ ASHCROFT, JEROME L., Jr., Commander, USN, during the period 17 Jun 1963 to 8 Jun 1964 as a member of the U. S. Navy Advisory Group, U. S. Military Assistance Command, Vietnam, and as Senior U. S. Navy Advisor to Commander Coastal Force, Vietnamese Navy. Traveling continuously throughout the Republic of Vietnam, visiting Junk Division Bases to assist Coastal Force personnel in solving logistics, maintenance and operational problems, CDR Ashcroft also worked to improve the health and living conditions of Junkmen and their dependents living at remote bases, many of which were frequently attacked and harassed by the Viet Cong. He was exposed to enemy gunfire on numerous occasions, and won the admiration and respect of Vietnamese naval officers by his courageous conduct under fire. The Combat Distinguishing Device is authorized.

Gold Star in Lieu of Second Award

★ FULLER, ROBERT P., Captain USNR, as Deputy Chief, Targets Branch, National Strategic Target List Division, Joint Strategic Target Planning Staff, from 17 Aug 1960 to 6 Jul 1964. During this period, CAPT Fuller contributed valuable assistance in the preparation of SIOP (Standard Integrated Operating Procedures). His efforts in the areas of management, targeting, and coordination of views with respect to SIOP development provided harmonious relationships among the members of the JSTPS. His proficiency in military intelligence and planning is shown by the successful accomplishment of the JSTPS mission.

TAFFRAIL TALK

THEY HAVE THOUSANDS of fans, yet few people who have not heard them perform know they exist. Appearing on the Mediterranean circuit in four countries this summer, their professional abilities have brought them praise in five languages.

They are the more than 100 sailors of USS *Franklin D. Roosevelt* (CVA 42) who use their talents to sing, play musical instruments and improvise onstage as they entertain our neighbors in Europe.

The appearances of these singers, musicians and comedians are made during the attack carrier's regular visits to Spain, Italy, Malta and Greece. Demonstrating that Americans have an appreciation for entertaining as much as for being entertained, this group makes up a large part of *Roosevelt's* people-to-people program during her 15th Mediterranean cruise.

For the most part, *Roosevelt's* talent show is made up of volunteers, who, during a shipboard talent show earlier this year, came up with acts too good to be ignored.

A group called "The Seafarers" are veterans of the show. They have sung their sea chanteys, popular songs and old American favorites in 25 cities, villages and towns from Spain to Turkey, in concert halls and on street corners.

Two bands were aboard *Roosevelt* for part of the cruise. They included a unit of Commander Naval Air Force, Atlantic Fleet, and the band of Commander Cruiser-Destroyer Flotilla 12. Providing concert or dance music, or combo arrangements of jazz and pop tunes, the bands perform well. Occasionally, they are grouped together for a large performance in a public park or square. But more often, combos are taken from each band and perform in clubs, at receptions or at public functions in the ports visited.

Other acts are presented by *Roosevelt* Navymen. A folk-singing trio, "The Wayfarers," provides some upbeat sound for the listeners. A pop-tune trio, "The Mess-Jackets," sing the more current state-side songs and add a few originals which they have written. At sea, The Wayfarers work on *Roosevelt's* flight deck while The Mess-Jackets are stewards in the officers' wardroom.

It's a fine way to meet people. In Barcelona, *Roosevelt* talent appeared in parades and at a circus. In Palma, the same groups had the populace dancing in the streets. At Naples, Capri, Ischia and Malta, the story was the same.

It seems the best performances are usually impromptu—the singers and musicians get together at a sidewalk cafe or on fleet landings during their liberty hours. It isn't long before a large group of attentive people have clustered around.

That's show business—Navy style.

★ ★ ★

The mess decks of USS *Newport News* (CA 148) have also taken on the atmosphere of a supper club lately. Instead of the usual piped-in music, a five-piece dance combo of the Second Fleet Band provides live jazz and ballads as *Newport News* sailors relax during the mid-day break.

The combo's motive: They're practicing for future engagements which they will have during visits to overseas ports. The group will become accustomed to playing before an audience and provide entertainment for the crew at the same time.

The All Hands Staff

The United States Navy
Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D.C. 20370.

• **AT RIGHT:** ANCHOR MEN—The Fifty-State Flag team fram NTC, San Diega, farms the symbalic Navy anchar as the team begins its fifth year as a performing unit. Flags are arranged according ta protocol in arder af admissian ta the Union.




FOR THE FREE WORLD...
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